DOCUMENT RESUME

ED 454 570 EA 030 973

AUTHOR	Kelly, Michael J.
TITLE	Planning for Education in the Context of HIV/AIDS. Fundamentals of Educational Planning 66.
INSTITUTION	United Nations Educational, Scientific, and Cultural Organization, Paris (France). International Inst. for Educational Planning.
SPONS AGENCY	Swedish International Development Cooperation Authority, Stockholm.
ISBN	ISBN-92-803-1198-0
PUB DATE	2000-00-00
NOTE	112p.
AVAILABLE FROM	United Nations Educational, Scientific, and Cultural Organization, 7 place de Fontenoy, F 75352, Paris 07 SP, France. Web site: http://www.unesco.org/iiep.
PUB TYPE	Guides - Non-Classroom (055)
EDRS PRICE	EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Acquired Immune Deficiency Syndrome; Disease Incidence; *Educational Planning; Elementary Secondary Education; Foreign Countries; Needs Assessment; Policy Formation; Role of Education; *Strategic Planning

ABSTRACT

This booklet explains how HIV/AIDS affects education. It focuses on how the epidemic has lessened the number of children to be educated, reduced the number of available teachers, and thinned the ranks of available administrators. The text emphasizes two important themes: education's role in informing people about HIV/AIDS and the toll the epidemic has taken on the education system. It opens the discussion by describing the nature and features of HIV/AIDS and the global extent of the epidemic. It measures the impact of HIV/AIDS on development and discusses the shame and silence associated with the condition. The text describes the role of education in HIV prevention and the need for a radical approach in addressing this monumental problem. The booklet then shifts into a discussion of the direct effects of AIDS on the education system. It outlines the impact on pupils and school enrollments, describes the epidemic's effects on potential clientele for education, and discusses how teachers, teaching, and the supply of education are changed, as are the content of education, the process of education, the organization of education, and the role of education. It also measures how HIV/AIDS affects funding and planning for education. (Contains 27 references.) (RJM)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 454 570

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

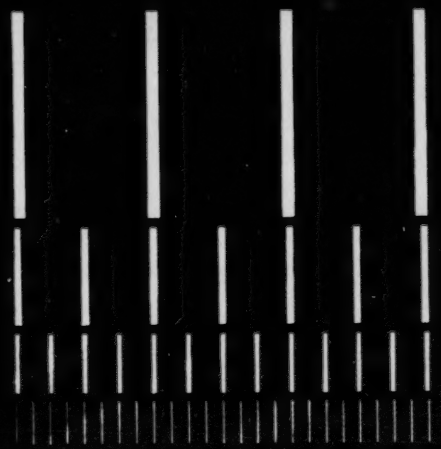
J. Hall

2A TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Planning for education in the context of HIV/AIDS

Michael J. Kelly

UNESCO
International
Institute
for Educational
Planning



EA 030973

BEST COPY AVAILABLE

Included in the series:*

2. The relation of educational plans to economic and social planning, *R. Poignant*
4. Planning and the educational administrator, *C.E. Beeby*
5. The social context of educational planning, *C.A. Anderson*
6. The costing of educational plans, *J. Vaizey, J.D. Chesswas*
7. The problems of rural education, *V.L. Griffiths*
8. Educational planning; the adviser's role, *A. Curle*
9. Demographic aspects of educational planning, *Ta Ngoc C.*
10. The analysis of educational costs and expenditure, *J. Hallak*
11. The professional identity of the educational planner, *A. Curle*
12. The conditions for success in educational planning, *G.C. Ruscoe*
13. Cost-benefit analysis in educational planning, *M. Woodhall*
18. Planning educational assistance for the second development decade, *H.M. Philips*
20. Realistic educational planning, *K.R. McKinnon*
21. Planning education in relation to rural development, *G.M. Coverdale*
22. Alternatives and decisions in educational planning, *J.D. Montgomery*
23. Planning the school curriculum, *A. Lewy*
24. Cost factors in planning educational technological systems, *D.T. Jamison*
25. The planner and lifelong education, *P. Furter*
26. Education and employment: a critical appraisal, *M. Carnoy*
27. Planning teacher demand and supply, *P. Williams*
28. Planning early childhood care and education in developing countries, *A. Heron*
29. Communication media in education for low-income countries, *E.G. McAnany, J.K. Mayo*
30. The planning of nonformal education, *D.R. Evans*
31. Education, training and the traditional sector, *J. Hallak, F. Caillods*
32. Higher education and employment: the IIEP experience in five less-developed countries, *G. Psacharopoulos, B.C. Sanyal*
33. Educational planning as a social process, *T. Malan*
34. Higher education and social stratification: an international comparative study, *T. Husén*
35. A conceptual framework for the development of lifelong education in the USSR, *A. Vladislavlev*
36. Education in austerity: options for planners, *K. Lewin*
37. Educational planning in Asia, *R. Roy-Singh*
38. Education projects: elaboration, financing and management, *A. Magnen*
39. Increasing teacher effectiveness, L.W. Anderson
40. National and school-based curriculum development, *A. Lewy*
41. Planning human resources: methods, experiences and practices, *O. Bertrand*
42. Redefining basic education for Latin America: lessons to be learned from the Colombian Escuela Nueva, *E. Schiefelbein*
43. The management of distance learning systems, *G. Rumble*
44. Educational strategies for small island states, *D. Atchoarena*
45. Judging educational research based on experiments and surveys, *R.M. Wolf*
46. Law and educational planning, *I. Birch*
47. Utilizing education and human resource sector analyses, *F. Kemmerer*
48. Cost analysis of educational inclusion of marginalized populations, *M.C. Tsang*.
49. An efficiency-based management information system, *W. W. McMahon*.
50. National examinations: design, procedures and reporting, *J. P. Keeves*.
51. Education policy-planning process: an applied framework, *W. D. Haddad, with the assistance of T. Demsky*
52. Searching for relevance: the development of work orientation in basic education, *Wim Hoppers*
53. Planning for innovation in education, *Dan E. Inbar*
54. Functional analysis (management audits) of the organization of ministries of education, *R. Sack and M. Saïdi*
55. Reducing repetition: issues and strategies, *Thomas Owen Eisemon*
56. Increasing girls and women's participation in basic education, *Nelly P. Stromquist*
57. Physical facilities for education: what planners need to know, *John Beynon*
58. Planning learner-centred adult literacy programmes, *Susan E. Malone and Robert F. Arnove*
59. Training teachers to work in schools considered difficult, *Jean-Louis Auduc*
60. Evaluating higher education, *Jeanne Lamoure Rontopoulou*
61. The shadow education system: private tutoring and its implication for planners, *Mark Bray*
62. School-based management, *Ibtisam Abu-Duhou*
63. Globalization and educational reform: what planners need to know, *Martin Carnoy*
64. Decentralization of education: why, when, what and how? *N. McGinn and T. Welsh*
65. Early Childhood education. Need and opportunity, *David Weikart*

* Also published in French. Other titles to appear.

Planning for education in the context of HIV/AIDS

Michael J. Kelly

Paris 2000
UNESCO: International Institute for Educational Planning

The Swedish International Development Co-operation Agency (Sida) has provided financial assistance for the publication of this booklet.

Published in 2000 by the United Nations
Educational, Scientific and Cultural Organization
7 place de Fontenoy, F 75352 Paris 07 SP
Printed in France by SAGIM
Cover design by Pierre Finot

ISBN 92-803-1198-0
© UNESCO 2000

Fundamentals of educational planning

The booklets in this series are written primarily for two types of clientele: those engaged in educational planning and administration, in developing as well as developed countries; and others, less specialized, such as senior government officials and policy-makers who seek a more general understanding of educational planning and of how it is related to overall national development. They are intended to be of use either for private study or in formal training programmes.

Since this series was launched in 1967 practices and concepts of educational planning have undergone substantial change. Many of the assumptions which underlay earlier attempts to rationalize the process of educational development have been criticized or abandoned. Even if rigid mandatory centralized planning has now clearly proven to be inappropriate, this does not mean that all forms of planning have been dispensed with. On the contrary, the need for collecting data, evaluating the efficiency of existing programmes, undertaking a wide range of studies, exploring the future and fostering broad debate on these bases to guide educational policy and decision-making has become even more acute than before. One cannot make sensible policy choices without assessing the present situation, specifying the goals to be reached, marshalling the means to attain them and monitoring what has been accomplished. Hence planning is also a way to organize learning: by mapping, targeting, acting and correcting.

The scope of educational planning has been broadened. In addition to the formal system of education, it is now applied to all other important educational efforts in non-formal settings. Attention to the growth and expansion of education systems is being complemented and sometimes even replaced by a growing concern for the quality of the entire educational process and for the control of its results. Finally, planners and administrators have become more and more aware of the importance of implementation strategies and of the role of different regulatory mechanisms in this respect: the choice of financing methods, the examination and certification procedures or various other regulation and incentive structures. The concern of planners is twofold: to reach

a better understanding of the validity of education in its own empirically observed specific dimensions and to help in defining appropriate strategies for change.

The purpose of these booklets includes monitoring the evolution and change in educational policies and their effect upon educational planning requirements; highlighting current issues of educational planning and analyzing them in the context of their historical and societal setting; and disseminating methodologies of planning which can be applied in the context of both the developed and the developing countries.

For policy-making and planning, vicarious experience is a potent source of learning: the problems others face, the objectives they seek, the routes they try, the results they arrive at and the unintended results they produce are worth analysis.

In order to help the Institute identify the real up-to-date issues in educational planning and policy-making in different parts of the world, an Editorial Board has been appointed, composed of two general editors and associate editors from different regions, all professionals of high repute in their own field. At the first meeting of this new Editorial Board in January 1990, its members identified key topics to be covered in the coming issues under the following headings:

1. Education and development.
2. Equity considerations.
3. Quality of education.
4. Structure, administration and management of education.
5. Curriculum.
6. Cost and financing of education.
7. Planning techniques and approaches.
8. Information systems, monitoring and evaluation.

Each heading is covered by one or two associate editors.

The series has been carefully planned but no attempt has been made to avoid differences or even contradictions in the views expressed by the authors. The Institute itself does not wish to impose any official doctrine. Thus, while the views are the responsibility of the authors and may not always be shared by UNESCO or the IIEP, they warrant attention in the international forum of ideas. Indeed, one of the purposes

of this series is to reflect a diversity of experience and opinions by giving different authors from a wide range of backgrounds and disciplines the opportunity of expressing their views on changing theories and practices in educational planning.

It is only recently that educational planners have begun to take stock of the need to address the issue of HIV/AIDS. In this booklet, Michael J. Kelly describes how, in many countries, the epidemic is undermining the education system in the same insidious way as it undermines the human body. Schools are struggling to survive under the strain of reduced teaching capacity, reduced community support, lack of adequate planning and reduced public funding. Despair has set in and many of those affected by the crisis and its daily ordeals are questioning the relevance of education at all.

The booklet stresses the need for the education system to react quickly and to envisage new, creative solutions. Indeed, education has a vital role to play in combating the epidemic, both in coping with the crisis here and now, and also because the 'window of hope', or least affected segment of the population, consists of school-aged children.

As the author explains, there is no set formula for dealing with the situation. Each country, each community, each school will have to search for the strategies most suited to their case. However he does make apposite suggestions, and insists upon the necessity of breaking the silence that shrouds the issue. This booklet will be invaluable to teachers and planners alike, as well as to all those concerned by the question of HIV/AIDS.

The Institute would like to thank Michael J. Kelly, Professor of Education at the University of Zambia, for his precious and timely contribution.

Gudmund Hernes
Director, IIEP

Composition of the Editorial Board

Chairman:	Gudmund Hernes Director, IIEP
General Editors:	Françoise Caillods IIEP
	T. Neville Postlethwaite (Professor Emeritus) University of Hamburg Germany
Associate Editors:	Jean-Claude Eicher University of Bourgogne France
	Claudio de Moura Castro Inter-American Development Bank USA
	Kenneth N. Ross IIEP France
	Richard Sack Association for the Development of Education in Africa (ADEA) France
	Rosa Maria Torres International Consultant Argentina

10

Preface

In some countries of southern Africa, nearly one adult out of three is infected with HIV/AIDS. This alarming figure gives an idea of the calamity that has hit Africa and is threatening other regions of the world. Fortunately, the rate of prevalence is not so high in many other countries of sub-Saharan Africa – 8 per cent of adults are infected on average in the continent – and is much lower in other regions of the world. Nevertheless, the number of newly infected persons is increasing fast in several other regions – the Caribbean and Eastern Europe in particular. The frightening feature of this pandemic is that there is currently no affordable treatment in developing countries and thus the most efficient means of fighting HIV/AIDS is the introduction of new sexual behaviour, including delaying sexual debut, a message which is not easy to communicate to young adolescents and adults.

For a long time, HIV/AIDS was considered to be essentially a medical problem. However it has become clear that prevention is essential and that education might potentially be the single most powerful weapon against HIV transmission. Several programmes and curriculum innovations have been introduced to promote HIV/AIDS awareness and prevention among young people. Many of these programmes have not yet had the expected results. This, however, is not a reason for not pursuing the programmes; on the contrary it is a signal that approaches need to be improved: activities need to be better targeted, more flexible, prolonged, consistent and above all made intersectoral, combining formal and non-formal education, education with health, education with strategies to fight poverty, education with mass-media campaigns. This recognition is an invitation for educational planners to become more involved in prevention campaigns, in the support of curriculum renewal and in the search for appropriate delivery strategies, not leaving it to curriculum planners and inspectors alone.

Another major concern of educational planners should be to protect the education system itself from the ravages of the pandemic.

HIV/AIDS affects the education system just as it affects the body: for years the effects of the sickness remain unnoticed, business as usual. There are slightly more teachers absent, leaving the educational system, or dying, but the causes are so manifold that it seems unnecessary to really talk about it. And then suddenly the statistics come out on the proportion of skilled and highly educated manpower infected – much higher than for the rest of the population, on the number of teachers infected and dying, and on the decline in the number of pupils and students. It is no longer possible not to speak about it.

Professor Kelly explains very clearly in this monograph how HIV/AIDS affects the education system. It affects the demand for education: there are fewer children to educate, fewer wanting to be educated or fewer who can afford to be educated. It also affects the supply of education and the quality of the educational process. It affects the management – with the risk that the whole system may become disorganized, paralyzed by fear and the lack of guidance on what is to be done. Last but not least, it reduces the resources available for education.

Solutions have to be found urgently if the tenuous advances towards Education for All are not to be jeopardized. Several solutions have been attempted at national level, but also at regional and local levels. Actors are progressively becoming mobilized. In this monograph, Professor Kelly gives several indications of what has worked in some countries and what remains to be done. But he rightly emphasizes that responding to the challenge of designing and managing education in a world with AIDS requires more than piecemeal approaches. It requires mobilization of all sectors of society, flexibility, openness to change, willingness to loosen bureaucratic procedures and constraints, and sensitivity to the needs of those infected and affected by HIV/AIDS. Let us hope, as he does, that this dreadful disease will force us all to make a "critical re-examination of what education is all about and how it can best be delivered", and thus not have only negative effects.

Professor Kelly, a member of the Jesuit order, is Professor of Education at the University of Zambia. He has been an observer and an actor on the education scene in Zambia and in southern Africa for

many years. Associated with all of Zambia's educational reforms, he has become in recent years increasingly involved in analyzing the HIV/AIDS epidemic's potential to undermine an education system. With his long experience he was the best person to write a monograph that would be both comprehensive and realistic, and forcefully call upon planners and decision-makers to act without ever giving the impression that the challenge be too big to be taken up. The Editorial Board considers this insightful and thought-provoking monograph to be a crucial contribution to the debate on HIV/AIDS and education.

Françoise Caillods
Co-General Editor of the series

13

List of acronyms

AIDS	Acquired Immune Deficiency Syndrome
CBO	Community-Based Organization
CIDA	Canadian International Development Agency
EFA	Education For All
ESARO	Eastern and Southern Africa Regional Office
GDP	Gross Domestic Product
HEARD	Health Economics and HIV/AIDS Research Division
HIV	Human Immuno-Deficiency Virus
IDU	Intravenous Drug User
MSM	Men Who Have Sex with Men
MTCT	Mother-to-Child Transmission
NGO	Non-Governmental Organization
ONAP	Office of National AIDS Policy
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TB	Tuberculosis
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Fund

Contents

Preface 9

I. The AIDS epidemic 17
- Nature and features of HIV/AIDS 17
- Global extent of the HIV/AIDS epidemic 23
- The impact of HIV/AIDS on development 27
- The stigma, shame and silence associated with HIV/AIDS 29

II. The role of education in HIV prevention 32
- Education and HIV prevention 32
- HIV/AIDS infection in relation to level of education 39

III. The impact of HIV/AIDS on education 42
- The need for a radical approach 42
- Conceptual framework 45

IV. The impact of HIV/AIDS on educational demand and supply 48
- The impact of HIV/AIDS on pupils and school enrolments 48
- The impact of HIV/AIDS on the potential clientele for education 56
- The impact of HIV/AIDS on teachers, teaching and the supply of education 63

V. HIV/AIDS in relation to content, process, and organizational aspects of education 70
- The impact of HIV/AIDS on the content of education 70
- The impact of HIV/AIDS on the process of education 75
- The impact of HIV/AIDS on the organization of education 78
- The impact of HIV/AIDS on the role of education 83

VI. HIV/AIDS in relation to funding and planning aspects of education 88
The impact of HIV/AIDS on the funding of education 88
The impact of HIV/AIDS on aid agency involvement in education 93
The impact of HIV/AIDS on the planning and management of education 97

VII. Conclusion: The HIV/AIDS-driven need for a new approach to education and its delivery 102

References 104

Suggestions for further reading 107

List of acronyms 12

List of figures

1 The course of HIV/AIDS 19
3.1 The impact of HIV/AIDS on the education system 42
3.2 What HIV/AIDS can do to education 46

List of tables

1.1 Regional HIV/AIDS statistics and features, December 1999 25
4.1 Projected demographic impact of HIV/AIDS in selected countries, 2010 49
4.2 Orphan estimates, 2010 58
6.1 The projected impact of HIV/AIDS on economic growth 91

I. The AIDS epidemic

Nature and features of HIV/AIDS

HIV is a virus, the human immuno-deficiency virus, which weakens the body's ability to fight off infections such as tuberculosis. The virus is spread when body fluids (blood, semen) from an infected person enter the body of an uninfected person. This occurs in three principal ways: through unprotected sexual contact with an infected person, through the transfusion of contaminated blood, and through the shared use of sharp instruments that may carry contaminated blood (as can happen with the sharing of razor blades or the sharing of needles among injecting drug users). The virus can also be transmitted from an infected woman to her child during pregnancy, at the time of childbirth, or through breastfeeding (mother-to-child transmission, MTCT).

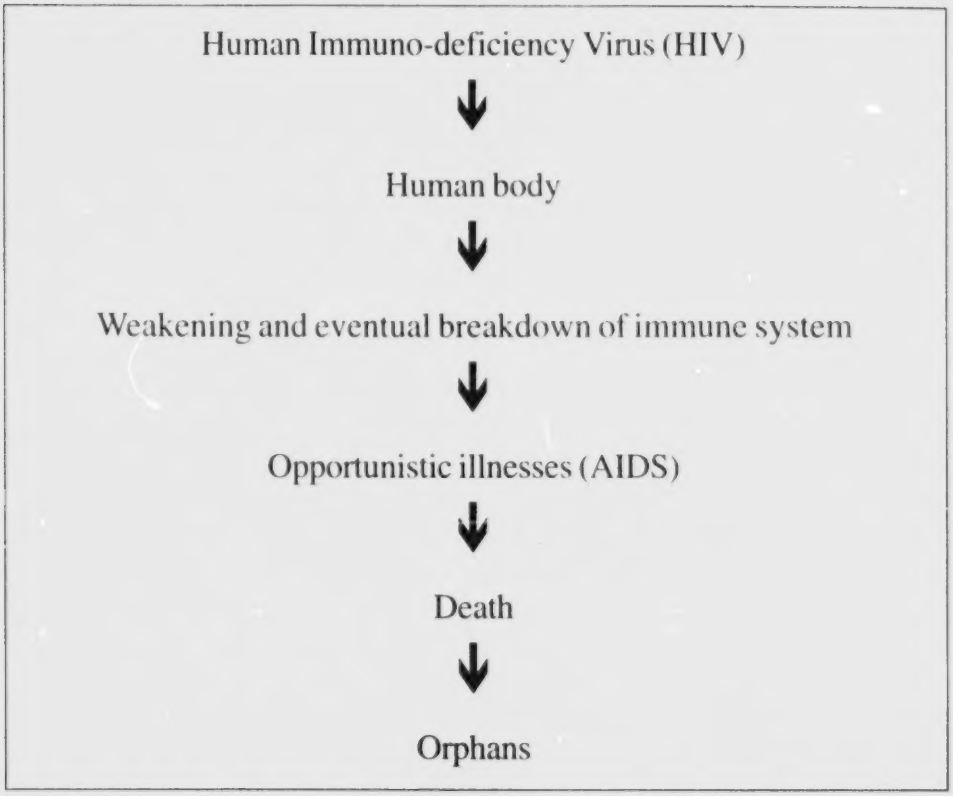
HIV belongs to the class of slow viruses, which manifest two features – slow progression and ready transmissibility. The deterioration of the human immune system in a person infected with HIV is long and slow. For several years the infected person may show no symptoms of being diseased, but may continue to look healthy and feel well. But all the while, the virus remains active within the organ systems of the body. This viral activity leads to a progressive weakening and ultimate breakdown in the body's defence system (*Figure 1.1*). Throughout this lengthy period of progressive deterioration (and subsequently), the virus can be transmitted through body fluids from the infected person to others. From the time of first infection, the infected person, though showing no symptoms, can transmit the HIV virus to others.

When the deterioration of the immune system reaches a certain degree, the person begins to experience, with increasing frequency, periodic bouts of illnesses and infections which an uninfected body would normally be able to ward off or cope with. Because of the HIV

infection, the individual lacks a viable immune response to these further infections. Because these infections use the opportunity provided by the body's weakened defence system to establish themselves, they are referred to as opportunistic infections. An individual who experiences the level of immuno-deficiency at which these opportunistic infections occur is said to have AIDS, the acquired immuno-deficiency syndrome. Thus, AIDS is caused by HIV and works in lethal conjunction with the opportunistic infections. As well as making the body susceptible to a variety of infections, the weakened immune system reduces to such an extent the potential of the body to recover from these infections that in the great majority of cases the person becomes steadily weaker and eventually dies. Most will die within eight to ten years from the time when they became infected, and many will die even sooner. In the absence of treatment, the period between the manifestation of what is called AIDS and death seldom lasts longer than two years

Individuals who have an established HIV infection are infected for life. There is no known way of reversing the HIV status of such an individual. The opportunistic infections can be treated relatively simply at moderate cost, thereby improving the clinical status of the AIDS patient. Potent, but currently very costly, treatment, through highly active antiretroviral therapy (HAART) can suppress viral activity in the body and thereby prolong the time that an HIV/AIDS patient can survive relatively symptom free. The virus, however, is not eliminated but only suppressed. A highly resistant reservoir, which establishes itself in the system very early in the course of infection, remains. Upon cessation of therapy, this explodes once more into activity. In other words, the antiretroviral drugs do not bring a complete cure. The absence of a complete cure is matched by the absence of a vaccine. None exists, and it could take several years before a vaccine becomes available for universal and affordable application.

Figure 1.1. The course of HIV/AIDS



In the absence of a complete cure, of affordable and manageable treatment, and of a vaccine, an uninfected person can avoid HIV infection and AIDS in only one way, by not sharing the body fluids of an infected individual. This can be done by avoiding activities that lead to such sharing, such as penetrative sex or the sharing of needles and sharp instruments. It can also be done by the use of barriers such as condoms or gloves which obstruct the sharing of body fluids. A further possibility lies in microbicides which would inhibit the entry, binding or replication of a viral infection (including the sexually transmitted infections (STIs) which facilitate HIV infection). However, while reducing the transmission of STIs, and hence of HIV, microbicides would not provide complete protection against HIV. What is more, major setbacks, experienced in 1999 and 2000 by promising

microbicide research, show that, although progress is being made, the development of a safe microbicide for topical application will be a long process. Hence, the only ways currently known for preventing sexually transmitted HIV infection are: engaging in sexual intercourse only with individuals known to be HIV-free, abstinence, and condom use. All three necessitate a substantial change in outlook and behaviour. All three have implications for education.

The majority of AIDS cases are found in adults between the ages of 20 and 50. Differences are usually noted between women and men, with the peak ages for AIDS cases being 20-29 for women and 30-39 for men. This means that AIDS strikes hardest at those who are in their most productive years. It wipes out the promise of years of education and training. It deprives families, communities and societies of experienced, skilled and active members. Because it reaches a peak in the age groups who are raising young children, it hits hard at families, leaving children orphaned and without support.

A significant number of AIDS cases also occur among children below the age of five. Almost all of these children will have received the infection from their mothers through the MTCT mechanisms, though some may have received it through sexual abuse or through contaminated blood. Almost all of these children die very young, but a small number may survive until they are of school-going age. Though found in children of primary school age, AIDS cases are comparatively rare in children in the 5-14 age group. This age group is referred to as the 'window of hope'. They are the young people who are least likely to be HIV-infected. If they remain so, they constitute a hope that the future will be less ravaged than the present by the AIDS epidemic.

The developmental stage of children in primary school, combined with their virtual AIDS-free status, imposes on schools the twofold responsibility of enabling them to remain uninfected while at school and of promoting the adoption by them of behaviour patterns that will keep them uninfected throughout life. Several factors combine to accentuate the challenges of these tasks:

- the majority of children reach puberty during their primary school years;

- although school grades are age-related, a significant number of children are older than the officially recognized age for their class and are already sexually active. This situation is aggravated in many countries by the late age of starting school and by grade repetition;
- in many societies, parents do not provide information on or discuss sexual issues with children, resulting in the children being vulnerable to negative influences in and outside the school;
- traditionally, schools give little help to children on sexual and reproductive health issues, and do little to assist them in understanding their sexual identity and coping with its demands;
- because they belong to the group which is most likely to be AIDS-free, young girls (and sometimes young boys) may be subjected to sexual attentions from adults who may be HIV-infected;
- the values and behavioural standards communicated to children by what they gather from the media, society around them, and sometimes from school personnel, weaken their ability to deal in a mature way with their emerging sexuality.

Coping with the epidemic and stemming its advance is made more difficult, in educational situations and elsewhere, by reluctance to acknowledge the existence of the disease at the personal level. The public culture may recognize that the epidemic poses major problems for public and private life, but the private culture all too frequently is one of denial and rejection. The majority of those who are HIV-infected do not know that they harbour the virus. Neither do they want to know, largely because of the way this signals a short remaining life, but partly also because society associates being infected with promiscuous sexual behaviour. When people experience AIDS-related sicknesses, the tendency is to focus on the illness and the immediate steps for its treatment, but without mention of AIDS. When death occurs, it is attributed to an opportunistic infection such as tuberculosis, but the role of HIV in destroying the body's natural defences against such infection is rarely acknowledged.

This silence within society brings in its train two further effects which have their repercussions on education systems. One is a sense of stigma and shame that has become attached to the disease. The

other is the infringement of the human rights of persons living with HIV or AIDS, and of their dependents.

Import for education

The overall import of HIV/AIDS for education stems from the features that have been outlined when taken in the context of the nature of education itself. The provision of education is essentially person-intensive. This is true whether one considers formal provision at primary, secondary and tertiary levels, or whether one considers non-formal provision. The current dominant model is that the provision of educational services implies, on the one hand, a teacher, trainer or lecturer and, on the other, a set of individuals, mostly young people and most often gathered together in groups that may range in size from two or three to well over a hundred. Developments in information and communications technology may eventually bring a change to this, but it is likely that this model will continue to prevail for a long time to come. The application of the current model means that between one-fifth and one-quarter of all people in the world are engaged in the direct work of education, as learners or as teachers. The proportion would rise even higher if the targets set by the Jomtien and Dakar conferences were met, with provision being made for every child, youth and adult to meet their basic learning needs.

In addition, every country has a very extensive network of educational management, administrative and professional staff, together with large establishments in such support areas as curriculum development, examinations, and extension studies. These contribute significantly to establishing conditions that are favourable for the direct educational encounter between learners and teachers.

Being so highly person-intensive makes education highly vulnerable to any infectious illness or disease. The operations of whole segments may be brought to a temporary halt by outbreaks of such infections as influenza or cholera. It is also seriously affected by the presence of HIV/AIDS. This is similar to other conditions in that it is highly infectious. It differs, however, in that preventing transmission requires behavioural changes that may require radical alterations in very intimate personal behaviour patterns. HIV/AIDS also differs from

other infectious conditions in that it does not consist in a relatively abrupt outbreak of mass illness which manifests itself after a short incubation period, which may be only temporary, which can be controlled by certain external measures relating to sanitation and hygiene, and for which vaccines and cures are frequently available. It further differs in that it manifests itself principally in those who are in their most productive years, between the ages of 20 and 50.

The implications of this for education are profound. AIDS does not remove people from education, or from any other sector, all at once. Activities of institutions and systems are not brought to a halt by any abrupt mass illness. Instead, they are undermined by a very gradual but irreversible attrition of personnel. The long, slow period of progressive deterioration in the body's immune defence system eventually manifests itself in a correspondingly long, slow declining ability of the infected person to perform. The decline eventually reaches the point where the individual, unable to provide any further work services, withdraws from active life into enduring, terminal health care. This means that for some time before death occurs, a person with AIDS cannot be continuously or actively employed on normal duties.

The inroads of AIDS also mean that those who are infected do not all leave an institution or the system at the one time. As the disease runs its course, it results in the reduction or cessation of activities by one person in one area one day, by another in a different area another day. Little immediate thought may be given to the need for replacements, but slowly, ineluctably, the human resource base of the institution or system is being eroded.

Global extent of the HIV/AIDS epidemic

In the late 1970s and early 1980s, what came to be known as AIDS made its first sporadic appearances in several countries. In the subsequent two decades, the epidemic spread rapidly, leading to an estimated 33.6 million individuals being HIV-infected by the end of 1999. At that time, it was estimated that AIDS was killing more people worldwide than any other infectious disease, while Africa alone

experienced almost as many AIDS-related deaths in the last two decades of the twentieth century as Europe experienced during the period of the bubonic plague in the fourteenth century.

The epidemic came early to certain parts of the world and late to others. It started in the late 1970s or early 1980s in sub-Saharan Africa, Latin America, the Caribbean, Western Europe, North America, Australia and New Zealand. In North Africa and the Middle East, in East, South and South-East Asia, and in the Pacific, it began in the late 1980s, while its onset in Eastern Europe and Central Asia was delayed until the early 1990s. The epidemic has taken different forms in these different parts of the world. In many countries, especially those where the prevalence is highest, HIV is transmitted largely through high-risk sexual activity and is generalized among men and women throughout the population. In others it tends to be concentrated in certain sub-populations, such as individuals who inject illicit drugs, sex-workers and their clients, and men who have sex with men. Potential exists for this concentration to be diluted with the virus being spread more generally in a population. This has happened in North-East India where the virus has spread rapidly among networks of male drug injectors and from the men to their wives.

UNAIDS notes that an HIV epidemic may take off in the general population of a country where there is a considerable amount of sexual mixing among adults:

> *to sustain a heterosexual epidemic, on average each infected person must have unprotected sex with a minimum of two partners, becoming infected by one and passing on the infection to at least one other. (But) since not every encounter between an HIV-positive and an HIV-negative partner will result in a new infection, a sustained heterosexual epidemic suggests that a substantial proportion of the population, both male and female, have a number of sex partners over their lifetime (1999c, p.6).*

Table 1.1. Regional HIV/AIDS statistics and features, December 1999

Region	Adults and children living with HIV/AIDS	Adult prevalence rate %	Main mode(s) of transmission for adults living with HIV/AIDS
Sub-Saharan Africa	23.3 million	8.0	Heterosexual
Caribbean	360,000	1.96	Heterosexual, MSM
South and South-East Asia	6 million	0.69	Heterosexual
Latin America	1.3 million	0.57	MSM, IDU, Heterosexual
North America	920,000	0.56	MSM, IDU, Heterosexual
Western Europe	520,000	0.25	MSM, IDU
Eastern Europe and Central Asia	360,000	0.14	IDU, MSM
North Africa and Middle East	220,000	0.13	IDU, Heterosexual
Australia and New Zealand	12,000	0.1	MSM, IDU
East Asia and Pacific	530,000	0.068	IDU, Heterosexual, MSM
World	33.6 million	1.1	

MSM = sexual transmission among men who have sex with men
IDU = transmission through injecting drug use

Source: UNAIDS, 1999c, p. 5.

Although the wealthier industrialized countries were among the earliest to experience HIV/AIDS, they have known a much less extensive epidemic than many developing countries. This is partly because the epidemic in industrialized countries tended to be confined to very specific sub-populations, such as drug injectors. It is also partly because these countries could afford to provide antiretroviral therapy for those diagnosed with HIV, and thereby prolong their lives. The very success of this therapy raises certain concerns: growing complacency among vulnerable groups about the dangers of HIV, with a consequent increase in high-risk behaviour; an increase in the number of HIV-positive persons who survive and hence have the potential to transmit the disease; the possibility of antiretroviral resistant HIV strains emerging due to difficulties in adhering to the demanding regime which the therapy requires.

At the close of the twentieth century, the region hardest hit by HIV/AIDS was sub-Saharan Africa, which had the largest number of HIV/AIDS cases and the highest adult prevalence rates in the world. (*Table 1.1*). In terms of absolute numbers, sub-Saharan Africa was followed by South and South-East Asia and then by Latin America, while in terms of adult prevalence rates it was followed by the Caribbean, South and South-East Asia, and the two Americas.

The global picture at the turn of the century was of an epidemic that:

- is among the world's top five killer diseases and is the leading cause of death in Africa;
- presents a growing socio-economic, health and security challenge to all countries;
- is spreading very rapidly in many developing countries, especially those of sub-Saharan Africa;
- is establishing itself firmly in the world's most populous countries;
- is clawing its way into societies and countries where previously it was almost unknown;
- confronts developed countries with the need to increase their prevention efforts, to devote substantial resources to AIDS therapy, and to avoid complacency;

- manifests a large and widening gap between rich and poor countries in HIV infection rates and AIDS deaths;
- is increasing rapidly among young people, with about half of those who become infected acquiring HIV before the age of 25;
- is leaving in its wake a rapidly increasing number of orphans.

The impact of HIV/AIDS on development

The world community has come to recognize that HIV/AIDS is not just a health problem. Much more, it is a development crisis of unprecedented proportions. There is little hope that in the face of the epidemic, development goals in the areas of human and economic well-being can be achieved. HIV/AIDS reduces life expectancy; increases child mortality; leaves large numbers of children without adult care; places intolerable strains on health-care systems; undermines economic development through increased labour costs and the decreased availability of skilled human resources; and impoverishes households. Of special concern in the context of the impact of the epidemic on education are its gender and poverty dimensions.

AIDS and gender

At the beginning of the twenty-first century, more adult men than women were HIV-positive: 18.1 million men compared with 15.5 million women. In sub-Saharan Africa, however, the position was the reverse, with 55 per cent of the HIV-positive adults being women and 45 per cent being men. In comparison with men, women are more likely to develop tuberculosis (TB) once they are infected, especially if they are under-nourished. This gives rise to the possibility that mortality from AIDS-related TB will rise more rapidly for women than for men.

A further gender dimension is that for both biological and cultural reasons women tend to become infected at an earlier age than men. For anatomical reasons, women who have unprotected sex are about four times more vulnerable than men to STDs, including HIV, and this vulnerability is higher for younger women. This is partly because the physiological immaturity of a young woman's reproductive system

provides less of a barrier to HIV infection, and partly because of the larger surface area exposed to contact. In addition, in some societies, the vulnerability of young women is aggravated by older men targeting young girls because they are seen as being free from HIV infection or in the belief that a cure for AIDS lies in having sex with a virgin. These and other factors lead to girls aged 15-19 being four to six times more likely to be HIV-positive than boys of the same age. It is worth noting that the younger one is when infected, the longer the time between HIV-infection and death. Hence, women who are infected at a young age can expect to survive longer than their male peers who become infected at a later age.

Cultural practices and attitudes play a paramount role in increasing the vulnerability of women to infection. In the majority of societies, women lack complete control over their lives and are socialized from an early age to be subordinate and submissive to men, particularly men who command power such as father, uncle, husband, or male guardian. Socially promoted male dominance and lack of self-assertiveness on the part of women make it very difficult for them to refuse sex or to insist on the use of condoms with a partner who may be HIV-infected. This leads to many women being infected by their sole sex partner – their husband, and increases the likelihood that the wife of a man who has died of AIDS will herself soon succumb to the disease.

AIDS and poverty

Unlike other infectious diseases, HIV/AIDS does not respect social barriers. It affects rich and poor alike. Nevertheless, poverty seems to facilitate the spread of the disease and worsen its impact. One overarching reason for this is that where poverty prevails, responding to immediate short-term survival or satisfaction needs assumes greater importance than protecting long-term benefits. This is very strongly the situation with HIV/AIDS, where no immediate deleterious consequences are experienced and the infection appears to lie dormant for several years.

More specifically, poverty creates situations of vulnerability to HIV infection, the following being noteworthy:

- the lower nutritional status of poor people;
- their poorer state of general health;
- their lack of access to adequate health services;
- the smaller likelihood of treatment for sexually transmitted diseases which they may have incurred;
- their lack of access to information and the means of protecting themselves in sexual encounters;
- the overcrowded conditions in which they live;
- the survival needs which cause poor women and girls to enter into sexual relationships and to protect their expected income by not insisting on condom use;
- the economic needs which propel young men from poor families to leave home and migrate from one high-risk locale to another in search of work;
- the virtual absence of pleasurable experiences, other than sex, available to poor people.

But if poverty exacerbates vulnerability to HIV/AIDS, the reverse is also true: HIV/AIDS aggravates poverty. It does so by thrusting households back on ever more limited resources as it removes wage-earners from employment, reduces the ability to engage in smallholding or agricultural work, deflects resources to medicines and health care, and draws down on savings or capital. The disease also aggravates the poverty situation through the reduction of employment opportunities as industry adjusts to its impact, and the decline in economic growth through the loss of skilled human resources and the use of resources for consumption rather than investment.

The stigma, shame and silence associated with HIV/AIDS

Persons living with HIV or AIDS frequently experience social stigma, scorn, or maltreatment. The belief is widespread that infected persons 'deserve' their fate because of their drug-using habits or 'promiscuous' sexual behaviour. The disease is also associated with fear – not merely fear of its ready transmission and lethal outcome, but also fear that one's HIV/AIDS status be known by a spouse or in the workplace.

This

> *stigma is a very real obstacle to both prevention and care. In many of the hardest-hit countries, government officials and ordinary citizens – including those most affected by the epidemic – often continue to look the other way because of the rejection, discrimination and shame attached to AIDS (UNAIDS, 1998b, p. 13).*

Discrimination against people who live with HIV/AIDS extends further than the social and community spheres. There are well-authenticated cases of individuals being denied medical care because of their HIV status, of employment being terminated or promotion denied on the same grounds, of children being excluded from school because of HIV/AIDS in their families. It has also been noticed that the stigmatization and discrimination may be greater against women than against men.

This situation breeds silence about the disease. There is no sincere acknowledgement of its presence. A wall of silence surrounds it, publicly and privately. There is a reluctance to get it out into the open. It is referred to by innuendoes and half-suggestions. It is concealed as TB or malaria or meningitis or just as 'a sickness'. This silence reinforces the sense of shame at both personal and institutional levels, and this in turn leads to further stigma and discrimination. A vicious circle quickly develops. False shame leads to silence, silence leads to stigma, stigma leads to a deeper sense of shame, and thereby to even greater silence and isolation. It all becomes so great that families, communities, the media, the public sector may try to behave as if AIDS did not exist. But all the while, this whole atmosphere provides a dark, secretive breeding ground for the further spread of the virus. There may be notional assent to the idea that AIDS is causing massive problems for families and society, is making the economic system unproductive and the social system unmanageable, but seldom is there real assent.

This silence is as great in the educational as in other spheres. It is one of the tasks of an education system in today's world to try to break through this barrier of silence that surrounds HIV/AIDS. Likewise, it is one of the tasks of the present volume to bring out into

the open what the epidemic can do to an education system. It is only when there is a clear conception of the catastrophic impacts that HIV/AIDS can have on the education sector that it is possible realistically to plan for accommodating and surmounting those impacts.

II. The role of education in HIV prevention

Education and HIV prevention

Planning perspectives

Major perspectives in planning for education in the context of HIV/AIDS are:

1. the role of education in reducing the spread of the disease, and
2. the impact of the disease on education systems.

Approaches that are based on the first perspective are largely, though not exclusively, concerned with curriculum issues – the content of educational programmes and how they are organized and delivered. Approaches that are based on the second perspective are largely, though not exclusively, concerned with systemic and organizational issues – demand, supply, resource and quality aspects of educational provision.

The two approaches do not belong to distinct watertight compartments. Elements of one can be found integrated within the other. Moreover, each approach calls for the other. It is virtually impossible to establish a role for education in reducing the spread of HIV/AIDS without considering how the disease impacts on the demand, supply, resources, and quality aspects of educational provision. Curriculum issues almost inevitably require consideration of systemic and organizational issues. Likewise, any situation which adversely affects the demand, supply, resource and quality aspects of education has profound implications for the content of educational programmes and the way they are organized and delivered.

Reducing HIV transmission by behaviour change

When the spectre of AIDS first began to loom large in the 1980s and early 1990s, attention focused mostly on how further spread of the disease could be prevented. HIV-control programmes were directed

to reducing infection along the principal transmission routes – needle-sharing among infected drug users and unprotected penetrative sex. Later, when the facts about mother-to-child transmissibility became better known, control programmes also targeted the possibility of HIV transmission from an infected mother to her child when breastfeeding. In all cases the objective was to bring about such change in behaviour as would render transmission of HIV less likely.

Programmes directed at injecting drug users encouraged clients to use only clean needles, which were made readily accessible in the majority of countries. In the case of mother-to-child transmission, there was need to weigh the benefits of breastfeeding for child health against the possibility of HIV transmission and, on this basis, to make choices about replacement infant-feeding methods. But since three-quarters of HIV transmission worldwide is through sex, the majority of behaviour-change programmes have been directed towards providing individuals with the knowledge and skills that would enable them to avoid sexual behaviour that would put them at risk of HIV infection. All three programme types are educational in nature, though the tendency when considering educational interventions for children and adolescents is to focus almost exclusively on those that relate to sexual knowledge and practices.

Education programmes for reducing sexually transmitted HIV

Educational programmes for in-school and out-of-school young people were seen as providing readily available channels for consciously influencing students through the curriculum and the values that the curriculum seeks to embody. Sexual health and HIV/AIDS programmes were developed for both formal and non-formal sub-sectors. The objective was that through relevant educational content, presented in a suitable way, students would be helped to develop personally held value systems which would empower them to make correct and safe choices that would reduce the likelihood of their contracting HIV. This was to be achieved by providing information and inculcating skills that would help self-protection, promoting behaviour that would strengthen young people's capacity to prevent personal disaster, enhancing capacity to draw others back from the brink, and reducing

the stigma, silence, shame, and discrimination so often associated with the disease. The fundamental purpose of all educational programmes was to develop values and attitudes that say 'yes' to life and 'no' to premature, casual, unprotected or socially unacceptable sex and sexual experimentation.

The importance of this approach was reaffirmed by UNAIDS in its 1999 World AIDS campaign with children and young people:

> *Policies on integrating quality lifeskills, sexual health, and HIV/AIDS education into school curricula, starting at primary school and continuing throughout a student's education, must be developed by Ministries of Education, in collaboration with parent-teacher associations and with the participation of student representatives. ... In addition it is critical that children and young people who do not attend school are also given access to lifeskills, sexual health and HIV/AIDS training (UNAIDS 1999a, p. 17).*

Sound reasons justify the focus on children and young people:

1. They are very numerous – the combined primary and secondary school enrolments accounted for about 18 per cent of the world's population in 1995, while sub-Saharan Africa's school-age population of more than 230 million accounted for over 30 per cent of its people.
2. They are very vulnerable to HIV/AIDS – UNAIDS estimates that in 1999 alone, 570,000 children under the age of 15 became infected, while by the end of that year one-third of the 33 million people in the world living with HIV were young people aged 15-24.
3. They are crying out for help as they suffer from the experience of HIV/AIDS, some in their own persons, many in their families and among their friends, many as orphans.
4. They are young, idealistic, optimistic, hopeful. They want to make a world for themselves and they want that world to be a better place than that which they have inherited from their predecessors. This was forcibly expressed by a delegation of young people to the 1993 International Conference on STD/AIDS in Africa: "We

strongly believe that our energy, idealism and commitment can be used to stop the further spread of the AIDS epidemic that is devastating the social and economic fabric of our own countries" (UNAIDS, 1999b, p. 4).

5. They are at a period of sexual awakening, learning and experimentation, and need extensive help and support in making constructive use of their new-found powers.
6. Most important, they are the window of hope for the future – even though some may already be HIV-infected, the overwhelming majority are not. The general picture is that in heavily infected countries, the individuals most likely to be HIV-free are those in the 5-14 years age group, that is, those who should normally be in primary school. This is where hope for the future really lies. The challenge that formal and non-formal educational provision faces is to work with these disease-free children to enable them to remain so.

The school and broader education systems have adopted various strategies for promoting HIV/AIDS awareness and prevention among young people. The central principle of these interventions is that they should help the participants to behave in ways that would protect them from HIV infection. Examples of the programmes and activities adopted include:

- integrating lifeskills and HIV/AIDS prevention into school curricula;
- integrating sexual and reproductive health and HIV/AIDS prevention into curricula for existing non-formal education programmes;
- developing new organizational structures and programmes for the promotion of HIV/AIDS awareness and prevention;
- providing a wide variety of peer education and/or peer counselling programmes designed to contribute to HIV/AIDS prevention, care and support. Peer education typically involves members of a given group striving to effect change in other members of the same group. It has been used successfully in both school (as in the 'Expanded life planning education project' in Oyo State, Nigeria) and non-school settings (as in the 'Behaviour change – an education for life process' in Uganda and Zambia);

- diffusion of local responses and solutions to the HIV/AIDS crisis and its impacts, as in the 'School without walls' approach used in the Southern Africa AIDS Training Programme;
- promoting the involvement of school students in HIV/AIDS education, both within the classroom and through co-curricular activities. These activities, which are allied to peer education, encourage young people and children to share the information they already possess. This can be effected through such mechanisms as anti-AIDS clubs (Zambia), essay competitions within and between schools (Thailand), participatory dance and drama (Uganda);
- using one or more entertainment and information media (drama, comedy, community theatre, TV, radio, newspapers, songs, puppets) to convey messages about HIV/AIDS and to develop attitudes and practices that promote the protection of self and others (as in the 'edutainment' model used by Soul City, South Africa).

Where these approaches have been evaluated, the findings have not been altogether clear. Problems arise from the multiplicity of interventions and initiatives, the absence of shared knowledge and co-ordination, and the focus on attitudes, beliefs, or HIV/AIDS knowledge as the measure of successful programme impact (whereas the critical measure is the effect the programme might have on HIV incidence). The situation is almost as if, not being quite sure what to do, individuals, organizations and agencies feel that doing something would be better than doing nothing. The major and almost universal difficulty lies in determining the critical elements of a prevention strategy that will reduce HIV infection.

Educational planning for behaviour-change programmes

This having been said, the weight of the evidence is that HIV/AIDS prevention in education systems does indeed work, but it could work much better. For this to occur, activities need to be better targeted, more flexible, prolonged, consistent, intensive, intersectoral, multi-strategy and co-ordinated (UNESCO, 2000c). Bringing this about requires action in three priority areas:

- skills-based locally relevant HIV/AIDS and health education;
- counselling and supportive youth-friendly health services; and
- community links and partnerships for HIV/AIDS education.

The successful integration of skills-based locally relevant HIV/AIDS and health education into school and non-school programmes necessitates that the educational planner pay attention to the following issues:

- formulating clear curriculum objectives and a sharp demarcation of the content and methods that will be employed to achieve those objectives;
- ways of involving young people themselves and community members in programme planning, implementation and evaluation;
- the development of suitable materials, some for use in the training of educators, some for use in the training of students;
- how to develop materials and activities that will engage participants affectively as well as intellectually;
- extensive initial and ongoing training of teachers and other educators in providing HIV/AIDS (and health) education and psycho-social lifeskills;
- ensuring sustained support, interest and encouragement from all the structures within the system or organization;
- ensuring parental, community and religious leaders' approval and support for the treatment of sensitive sex-related issues;
- establishing linkages with critical support services and working towards the development of more accessible youth-friendly counselling and health services where young people can access information, support and referral.

Attending to these features underscores the need for a multisectoral approach as advocated at the Dakar World Education Forum. Putting them in place will scarcely be possible without strong policy backing from the top and extensive advocacy at all levels – within education ministries, non-governmental organizations, religious bodies, educational institutions, and communities. While attending to the specific details of the HIV/AIDS and health education programmes, the educational planner must attend also to these dimensions. They

are crucial for the success of any effort to make educational programmes effective in the prevention of HIV/AIDS.

Education's long-term role in relation to HIV/AIDS

Education plays a key role in establishing conditions that render HIV transmission less likely. The principal ways in which it does this are by:

- contributing to the promotion of national economic growth and personal poverty reduction;
- increasing individual propensity to access health services and to receive, understand, and act on public health messages;
- enabling improved health status through better nutritional knowledge and economic potential;
- reducing the gender inequality which is one of the fundamental driving forces of the HIV/AIDS epidemic;
- empowering people to claim and defend their rights, and to overcome stigma and discrimination;
- equipping people to insist upon accessible and good-quality health, education and social-safety-net services;
- promoting better understanding and practice in the areas of individual rights, relationships and responsibilities.

This is not to affirm that education alone is the long-term answer to the problem of HIV transmission, no more than it is the sole answer to the question of poverty reduction. But education is a critical element in the long-term struggle against HIV transmission. Oxfam's words about education and poverty could well be applied, *mutatis mutandis*, to HIV/AIDS: "Education is the world's single most powerful weapon against poverty. It saves lives. It gives people a chance to improve their lives" (Oxfam, 1999, p. 4). Education too can be the world's single most powerful weapon against HIV transmission.

This perspective adds a new dimension to the drive to provide Education For All (EFA). Over and above the commitment of the participants in the World Education Forum to EFA, their pledge to "ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and lifeskills

programmes" (Article 7 (iii), Dakar Framework for Action) was, in effect, an undertaking to establish a scenario that would render the transmission of HIV/AIDS less likely. The effort expended by an educational planner towards achieving EFA is simultaneously effort expended towards reducing HIV transmission. Conversely, conditions which obstruct the achievement of EFA, as understood at Dakar, perpetuate situations which are in effect a breeding ground for HIV transmission.

HIV/AIDS infection in relation to level of education

A troublesome issue in developing countries is that while HIV/AIDS is unravelling years of hard-won developmental gains, the developments themselves may fuel the spread of the epidemic. "Mining and construction of roads, dams, bridges, and other infrastructure often takes workers away from their families. This increases the risk of HIV infection for both workers and people living near the construction sites" (World Bank, 1999, p. 12). Development arteries, such as major commercial transport routes and border crossing points, have long been known for their high prevalence rates – significantly, a CIDA project (the Highway strategic AIDS reduction project) aims at reducing the incidence of HIV along one of Cambodia's major highways.

Considerable evidence from earlier investigations led to suggestions that the situation was somewhat similar in education. "At the individual level within countries, the probability of HIV infection is often greater among men and women with higher incomes and schooling" (World Bank, 1997, p. 127). Thus, an early Zambian study found a strong linear relationship between level of education and HIV infection – the percentage of infected persons in a hospital population rose steadily from 8.0 per cent for those with 0-4 years of schooling, through 14.7 per cent for those with 5-9 years, to 24.1 per cent for those with 10-14 years, before climaxing at 33.3 per cent for those with more than 14 years of education (Melbye et al., 1986). However, a rigorous analysis of a large number of earlier findings, which adjusted the original results for age, income, lifestyle variables and marital status, found that the purported associations between education and HIV

status were less strong than originally stated, and in several cases they disappeared completely (Hargreaves and Glynn, 2000). Instead, some protective effects of education were found (for instance, in Haiti, Thailand and Uganda). In Africa, however, HIV risk appeared to increase with schooling in older age groups.

This apparent relationship between level of education and risk of HIV infection was probably attributable to the association between higher levels of education, on the one hand, and higher income and greater mobility, on the other. Both of these factors increase risk through their potential to facilitate greater sexual promiscuity.

However, two points are of greater importance in the context of looking to the education system to lead to behaviour changes that will reduce the risk of HIV infection. First, studies that were conducted in the 1980s and first half of the 1990s dealt mostly with subjects who had become HIV infected in the early stages of the epidemic, before much was known about HIV or its prevention. Hence there was little possibility for education to have any protective influence. The limited available evidence, however, suggests that a change has occurred over time, with the association between level of education and HIV infection being less in younger than in older age groups. This points to the possibility that education is beginning to realize its potential of protecting against infection.

Second, although the risk of HIV infection was found to increase with the level of formal education, there is no evidence that any of this education dealt with sexual and reproductive health, lifeskills or HIV prevention. Instead, it was almost entirely of the 'traditional' generalized type. The importance of this for the planner who wishes to mobilize the education system to reduce the risk of HIV infection cannot be exaggerated, for it means that the content of education must undergo radical change if it is to counter the spread of HIV/AIDS.

If education is to play a role in reducing the spread of HIV/AIDS, then it cannot be business as usual. There is need to plan for curriculum renewal that will centralize the issues of HIV prevention and control.

At a minimum, this requires attention to curriculum content and delivery strategies.

Curriculum content should include:

- reproductive health and sexual education;
- HIV/AIDS in the community;
- psycho-social life skills;
- human rights, relationships and responsibilities.

Strategies should be concerned with:

- integrating reproductive health and sexual education into the curriculum from the time children start school;
- greater reliance on education by peers from within and outside the school;
- capitalizing on the resources inherent in persons living with HIV/AIDS;
- greater involvement of communities, CBOs, NGOs, churches, and voluntary organizations;
- comprehensive re-orientation and re-training of teachers and teacher educators;
- establishing linkages with critical support services, especially in health areas.

III. The impact of HIV/AIDS on education

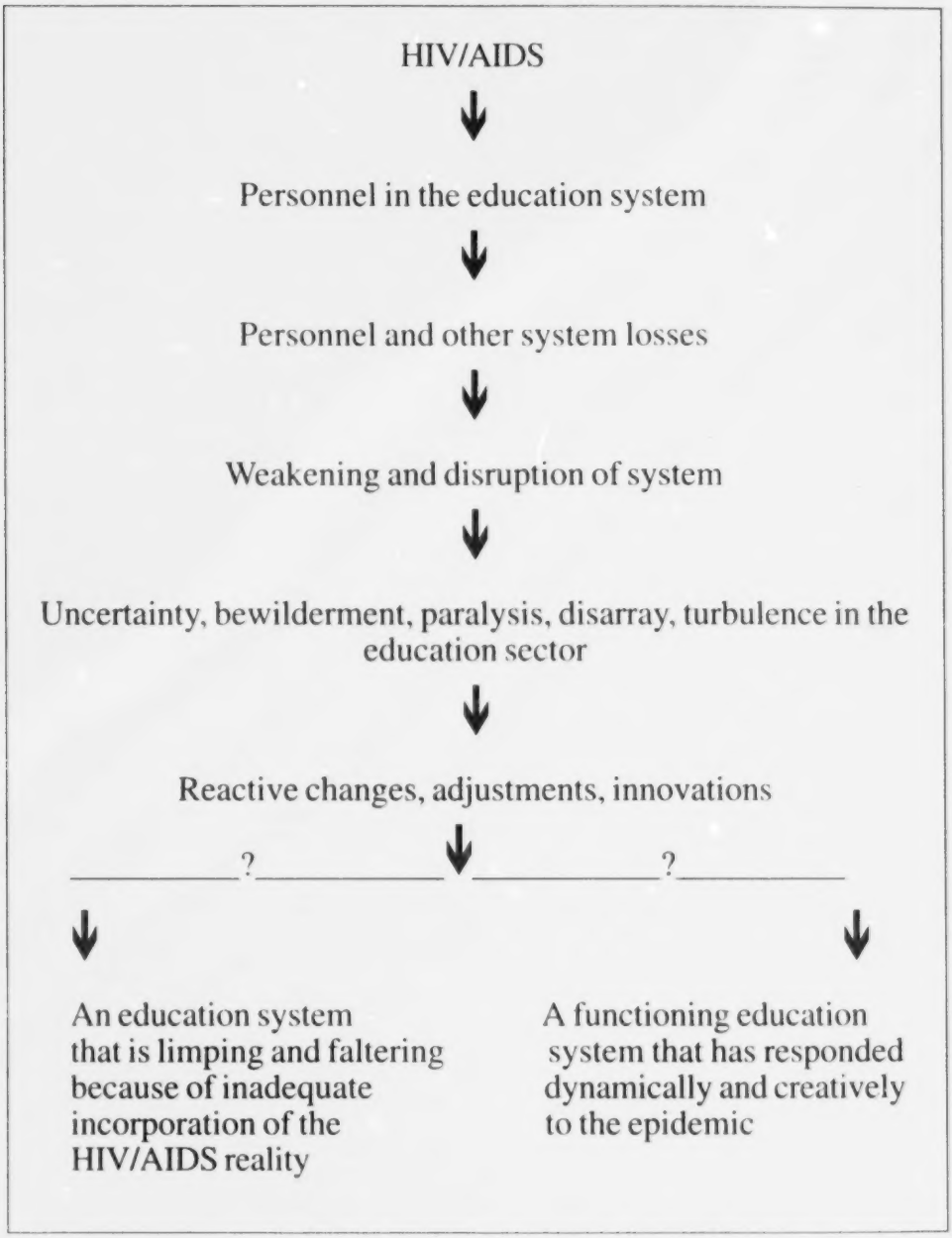
The need for a radical approach

When a person becomes infected with HIV, the virus attacks a subset of immune system cells which organize the body's overall immune response. This onslaught of the invading virus gradually overcomes the body's immune system until it is too weak either to cope with the attacks of the virus or to protect the infected person against various opportunistic infections. Inexorably, the time arrives when the individual succumbs to these and eventually yields to death.

Something similar happens in society. HIV/AIDS weakens or destroys vital 'cells' – the individuals, organizations, structures, programmes, projects that propel the functioning and development of society. This happens in every sector, every profession, every occupation. It happens in the public arena no less than in the private. In the absence of appropriate measures, the structures of society in a seriously HIV-infected country become weakened and disrupted. Seemingly unable to protect their members against disease and death, they become prey to a host of opportunistic problems – uncertainty, bewilderment, paralysis, disarray, turbulence – which lead in turn to a number of reactive changes and adaptations. Of themselves, simple linear adjustments will not ensure the survival of the institutions of society, any more than traditional medicines will ensure the survival of the HIV/AIDS patient. HIV/AIDS does to society what it does to individuals.

This is as true of the education sector as of any other. Indeed, because the education 'industry' is so person intensive, the sector may be more vulnerable than others to the disruptive impacts of HIV/AIDS. The negative impacts, however, are not confined exclusively to personnel losses. The system is unsettled from other losses which the educational policy-maker or planner must take into account (*Figure 3.1*).

Figure 3.1. The impact of HIV/AIDS on the education system


HIV/AIDS
Personnel in the education system
Personnel and other system losses
Weakening and disruption of system
Uncertainty, bewilderment, paralysis, disarray, turbulence in the education sector
Reactive changes, adjustments, innovations
?
?
An education system that is limping and faltering because of inadequate incorporation of the HIV/AIDS reality
A functioning education system that has responded dynamically and creatively to the epidemic

The all-round potential of HIV/AIDS to destroy education as it has traditionally been known is evidenced by the emerging chaotic conditions in countries which are seriously affected by the epidemic. As their education systems become increasingly difficult to manage, these countries experience regular manifestations of the disarray and turbulence that HIV/AIDS brings to the sector in terms of demand, supply, resources, planning and quality. Many of them strive to conduct business as usual, but find that they are beset by a spirit that is an unhealthy mixture of unreality, bewilderment, uncertainty as to what should be done, and helplessness – qualities which are the antithesis of those which should characterize an educational planner.

Critical tasks are to identify the potential areas of impact and to design appropriate responses. Some interventions may be designed in reaction to circumstances that have actually been experienced. However, coping with the HIV/AIDS situation in the education sector requires more than this. It was suggested in the previous chapter that the content of education must undergo radical change if educational provision is to help in countering the spread of HIV/AIDS. Likewise, the educational policy-maker or planner must be prepared to consider radical changes in the structure, organization and provision of education if it is to deal successfully with the effects of AIDS. It cannot be merely a question of responding to impacts that are already being experienced. There is need to survey the entire situation, anticipating what might possibly happen, forestalling undesirable situations, and managing the potential impact with a view to enabling the system to pursue and attain its essential objectives.

Planning which remains content with reactive, coping responses to difficult and crisis situations may seem to be making the necessary minimum adjustments. It may seem to be placing the education system on the road to stability. But as long as the present inroads of HIV/AIDS persist, such an education system will remain at risk and in danger of being overwhelmed by the reality of the epidemic. The extent and magnitude of the epidemic's potential impacts are such that policy-makers and planners must go beyond traditional approaches and solutions. If they wish to see their systems survive in the face of HIV/AIDS, they must be prepared to work towards the development

of radically new approaches. Incorporating the reality of HIV/AIDS necessitates mainstreaming the AIDS perspective in all aspects of policy formulation, planning and action. It demands the openness to consider new and hitherto untried solutions and modalities. It calls for vision, flexibility, and a courageous readiness to depart from the status quo. Ensuring the survival of a functioning education system necessitates responding dynamically and creatively to the educational impacts of the epidemic. The reason lies in the range, size and complexity of the numerous ways through which HIV/AIDS can undermine the education sector.

Conceptual framework

The impacts that HIV/AIDS has on education can be analyzed in terms of demand, supply, and quality. An analysis from these three perspectives can provide valuable insights into the way the epidemic can undermine an education system. However, the needs of the educational planner are better served by a more fine-grained analysis that dismantles the demand, supply and quality aspects. Such disaggregation equips the planner with a more powerful and fruitful understanding of the potential of HIV/AIDS to cause turbulence in the sector.

Hence, when planning for education in the context of HIV/AIDS it is profitable to conceptualize the epidemic as affecting the system through 10 different mechanisms (*Figure 3.2*). It affects the demand for education; those who are its potential clients; the sufficiency of its personnel to supply educational services; the content of what is taught; the processes involved in that teaching; how schools are organized; the nature of education's role; the funds needed for education; aid agency involvement in the system; and sector-wide planning and management.

Figure 3.2. What HIV/AIDS can do to education

HIV/AIDS has the potential to

- ➔ affect the demand for education
- ➔ affect the potential clientele for education
- ➔ affect the supply of education
- ➔ affect the content of education
- ➔ affect the process of education
- ➔ affect the organization of schools
- ➔ affect the role of education
- ➔ affect the availability of funds for education
- ➔ affect aid agency involvement in education
- ➔ affect the planning and management of the education system

The educational planner needs to scrutinize each of these mechanisms closely from various aspects:

- the extent to which the effects noted in the pages that follow manifest themselves in the education system of one's country;
- the information gathering and management systems that are required to ensure that up-to-date documentation about these and other effects are regularly brought into the policy-formulation arena and are shared with all partners in educational provision;
- the management systems that are needed to ensure that appropriate action is taken;
- the response-generation systems that can address the issues in original and resourceful ways;
- the co-ordination that is needed within the education ministry, with other government agencies and with partners in civil society, the churches and the aid community;

- the relationship to national educational plans of what HIV/AIDS is doing, or could do, to the education system;
- the interaction between education-related AIDS effects and responses, on the one hand, and national strategic responses to the epidemic, on the other.

In the pages that follow, almost all of the examples come from the field of formal education. This is not to imply that the impacts of HIV/AIDS are confined to this sub-sector. They are experienced wherever and in whatever form education is offered, but tend to be more fully documented in the formal than in the non-formal sub-sector. Therefore, what follows applies, with the necessary changes, to the entire education sector, that is to

> *the complete cycle of pre-employment learning from the preparatory or pre-primary phase through primary and secondary schooling, to both formal and semi-formal post-school and tertiary activity (Badcock-Walters, 2000, p. 1).*

It is also worth noting that several of the headings singled out in the conceptual framework apply equally well in other social and economic sectors. As in education, HIV/AIDS can affect demand, supply, availability of resources, potential clientele and other features in the health, community development, agricultural, defence and other sectors. What is occurring in education is paradigmatic for what is occurring in other sectors of society and, basically, throughout society as a whole. How education responds can provide a model that other sectors could follow.

IV. The impact of HIV/AIDS on educational demand and supply

The impact of HIV/AIDS on pupils and school enrolments

HIV/AIDS affects the demand for education because there will be:

- fewer children to educate;
- fewer children wanting to be educated;
- fewer children able to afford education;
- fewer children able to complete their schooling.

Demographic impact on the number of school-aged children

At the macro level, AIDS will have the long-term effect of populations being significantly smaller than they would have been in the absence of AIDS (*Table 4.1*). In each of Botswana, Malawi, Zambia and Zimbabwe, one outcome of the AIDS pandemic is that the populations in 2010 are projected to be smaller by about a quarter than they would otherwise have been, while in other countries in sub-Saharan Africa, populations will remain considerably smaller than if there had been no AIDS. These losses will be due to four factors:

1. large increases in adult mortality;
2. significant increases in AIDS-related child mortality; the possibility exists that in Malawi, Zambia and Zimbabwe infant and child mortality rates, already very high, may increase dramatically – the infant rate doubling and the child rate tripling (Hunter and Fall, 1998, p. 9);
3. a lower fertility rate; it is now known that HIV impairs a woman's fertility, resulting in an infected woman bearing 20 per cent fewer children than she otherwise would; and
4. reduction in births because of the premature death of women in their child-bearing years.

Table 4.1. Projected demographic impact of HIV/AIDS in selected countries, 2010

	Population (millions)			Population	
	Without AIDS	With AIDS	Loss to AIDS	Percentage loss to AIDS	Life expectancy (Years)
Botswana	2.1	1.6	0.5	23.8	33.4
Dem. Rep. Congo	74.6	69.3	5.3	7.1	51.3
Côte d'Ivoire	23.5	20.3	3.2	13.6	44.8
Ethiopia	87.0	81.2	5.8	6.7	51.3
Kenya	39.1	33.9	5.2	13.3	43.2
Malawi	14.1	10.7	3.4	24.1	29.5
South Africa	53.6	49.2	4.4	8.2	47.8
Tanzania	43.9	36.1	7.8	17.8	36.5
Uganda	32.7	26.4	6.3	19.3	35.2
Zambia	15.7	11.5	4.2	26.8	30.3
Zimbabwe	16.4	11.9	4.5	27.4	33.1

Source: Hunter and Williamson, 1997, Figure A-1.

This demographic development will result in the number of pupils of school-going age being smaller than it would otherwise have been. An AIDS assessment and planning study for Tanzania projected that "in the worst-case scenario, at the primary level there would be 22 per cent fewer children to be educated, and at the secondary level, the relevant age groups would be reduced by about 14 per cent" (World Bank, 1993, p.68). More recent estimates for other countries point in the same direction: in a matter of a decade, the number of children of primary school age will be lower than if there had been no AIDS:

- by 13 per cent in Kenya;
- by 23 per cent in Swaziland;
- by 12 per cent in Uganda;
- by 20 per cent in Zambia;
- by 24 per cent in Zimbabwe.

With the growth of the school-aged population being slower and the numbers of children of primary school age being much smaller than previously expected, these and similarly placed countries will face a less daunting task in achieving the international goal of universal primary education by 2015. But tragically this gain will have been bought at very high human and other costs.

Economic impact on participation in educational programmes

Regardless of how free an education system or activity purports to be, the recipient must always bear some costs – direct cash costs, indirect costs, opportunity costs, or all of these.

Apart from the direct cash costs of tuition fees, students in the majority of countries are faced with indirect costs. These refer to cash payments for such items as educational materials (textbooks, exercise books, ball-pens, pencils, etc.); school-related activities (clubs, sports, other recreational activities); school or parent-teacher association levies for school developments, supplies or maintenance; additional tuition; and uniforms. Where HIV/AIDS is prevalent, cash may not be available for these purposes. There are many reasons for this: the family wage-earner may have died; the family may have had to reduce its agricultural production because of sickness or death or because the only ones who can engage in agricultural work are the surviving old people or those who are very young; limited family cash resources may be consumed in care for the sick, travelling to clinics, grasping at what are claimed to be remedies; because of the deaths of other family members, it may have been necessary to assume care for orphaned children and to support these and one's own children with no increase in resources.

All of these circumstances currently affect millions of children. The AIDS-generated pressure on the limited cash resources available

to their families means that less is available for education. Because of HIV/AIDS, their families cannot afford to send them to school. This is confirmed by interviews with Lusaka teachers whose classes included pupils whose parents had died of AIDS. All reported that, following the death of the parent, the pupils stopped attending because of school fees and the costs of school requisites (UNICEF, 1996).

Opportunity costs also create a substantial barrier to participation in school and other educational programmes. Children or young people may be needed in the AIDS-stricken home to care for or stay with the sick; to free up an adult from domestic or economic activities so that the adult can care for the sick; to care for younger siblings; to take over an adult's income-generating activities; to accompany sick persons to health-care centres; to head households because of the death or terminal sickness of parents. Where these demands for the child's labour are intermittent, they lead to considerable late-coming to school or repeated absence from school, factors which adversely affect the learning achievement of the child and which may ultimately lead to termination of school participation. Where the demands for the child's labour are more or less continuous, any meaningful continued school participation becomes virtually impossible. In both cases, AIDS-originated opportunity costs reduce the propensity of children to participate in school or other educational programmes, and of parents to require them to do so.

Attitudinal impact of HIV/AIDS on school participation

Because of HIV/AIDS in their families, many children do not want to attend school. For some, the deterrent is fear of the stigma and scorn that they may encounter in school – the mockery of their schoolmates, the pointed remarks, the sudden silences, the fears of other parents, the exclusion and ostracism, the reduced availability of ready money, the external signs of increasing poverty. For others, the deterrent is the trauma they have experienced in seeing a parent or other significant and loved adult enduring remorseless suffering and a dehumanizing death. Teachers in many countries acknowledge the difficulties these heavily traumatized children experience in learning. They are aware that the minds of these children are locked in a state

of prolonged shock and that they are in dire need of counselling and support. They know also that there are many other children in the community who do everything possible to avoid attending school once AIDS has struck in their families.

An emerging psychological factor is a sense of fatalism in parents. In some heavily infected countries, these are beginning to question the value of sending children to school when it seems likely that even these children will die young before they have been able to garner any economic returns for what was spent on their education. This hopelessness broods heavily with them and communicates itself to their children, who likewise question whether a substantial part of the few years they will have of life should be spent in school. Because AIDS is so rampant in their communities – and possibly in their families – they do not want to be educated.

This AIDS-driven fatalism to school participation works in synergy with negative attitudes arising from parental disillusion with the quality of educational provision, a disillusion which itself is AIDS related. Parents show disinclination to send children to school because little learning is occurring, teachers are frequently absent, few learning materials are available, employment prospects are slender. All of these are factors in which AIDS can play a role. Although no rigorous studies have been conducted, it seems likely that some of the parental disillusion which is already leading in some countries to a decline in school participation is rooted in the way AIDS is impacting on the quality and relevance of educational provision.

Some parents are also put off by the apparent correlation that existed in the past between educational status and HIV risk. They are frightened by what they see, that HIV appears to occur more commonly among the educated. They may value education as opening the door to greater prosperity, but they do not want to expose their children to the risk of HIV infection.

The adverse impact of HIV/AIDS on demand for education also surfaces in isolated reports about communities being so extensively ravaged by AIDS that they have migrated elsewhere, in the hope of leaving the fatal disease behind. This leads to uncertainty about the

continued need for a school in the abandoned area, as well as to additional pressure on the schools in the places where the affected families settle.

Gender implications

Almost invariably, when demand for education falters, the first one to be negatively affected is the girl, above all the girl in a rural setting. This is the case in virtually all the situations considered above. If there are problems in meeting the cash costs of education, a boy will be favoured in preference to a girl. Because many societies consider that a girl's place is in the home, it is the girl rather than the boy who is likely to be deprived of educational opportunities, through the need to provide domestic care and service in an AIDS-stricken household. Parents who fear that their children will know only a short life want to see their daughters married at an early age so that they can bear as many children as possible in the short time available to them, and thereby ensure the continuity of the family. Because the cultures of almost every society socialize boys to be strongly masculine, dominant and emotionally self-possessed, boys who have been traumatized by the experience of AIDS may seek to repress their emotional disturbance (very likely, to their eventual damage) and continue to attend school. Girls, on the other hand, are frequently socialized to be submissive, yielding, dependent and emotionally more demonstrative, and hence are more likely to remain or be kept away from school because of AIDS trauma.

It also seems certain that HIV/AIDS has motivated older men, especially of the 'sugar daddy' type, to turn to young girls for sex, in the belief that they are HIV-free. As mentioned already, there is also some turning for sex to young uninfected girls in the false belief that such an encounter would provide a cure for HIV infection. Both practices place girls at enormous risk. Aware of these practices, and to some extent of the associated risks, some parents do not allow their daughters to attend school or other educational programmes, especially if there is some distance between the girl's home and the school or educational facility.

The sombre conclusion is that HIV/AIDS further complicates the full and rightful participation of girls in educational programmes, making it more difficult to achieve this objective than it would have been in a world without AIDS.

Implications for educational planning

In the context of widespread HIV/AIDS, educational planning must take all of the foregoing demand issues into account:

1. At the demographic level, the population projections on which the future development of the education sector is based must incorporate the best available information on the HIV/AIDS situation in the country. There should be extensive use of computer-based models which allow various projections using different assumptions about the course of the epidemic in the country. The demographic information derived from these models should inform all planning for the extension, contraction or adjustment of the education sector. This information should be regularly updated (a factor which points to the need for satisfactory data collection and use). In addition to being derived and applied at national level, it should also, where possible, go down to regional and district levels.

2. At the cost level, it will be necessary to determine how all direct costs of basic education can be removed and how the impact of indirect costs can be mitigated. In many cases this will necessitate establishing carefully targeted bursary programmes, even though these occasion great problems of transparency and sustainability. The participation of the community is essential to ensuring that bursaries reach all and only those who are in genuine need. Where widespread AIDS and deep poverty occur together, as is the case in many rural areas, it might be easier to target bursary support for many of the costs of education at entire schools rather than at individuals.

3. Reducing opportunity costs poses particular problems. Developing schools that are closer to students' homes is a strategy that responds to some of the needs in this domain, while at the same

time responding to some of the factors that impede the ongoing participation of girls. A more flexible daily school routine and school calendar would also facilitate the participation of a number of students from AIDS-affected families. But it is in relation to factors such as opportunity costs and relevance that there is the greatest need for imagination and resourcefulness in planning for educational provision in the context of HIV/AIDS. The basic questions, which will be raised again in the next section, are: how can education reach out to children who cannot come into school? How can education be provided for children who cannot afford to forego essential domestic and economic responsibilities in order to attend school? Are there ways in which education can go out to such children, instead of requiring them to come in? What alternative forms of education can be devised for such children? In some circumstances, the answer lies in harnessing the new information and communication technologies for this purpose. But this solution seems remote in time for poorer countries and people and for those living in sparsely inhabited rural areas. The problematical question for the educational planner remains: what can be done at once to ensure that the basic learning needs of AIDS-affected children are met?

4. The attitudinal and psychological problems experienced by both children and adults call for the establishment of effective counselling programmes. Many developing countries could not afford to appoint the large number of highly trained counsellors that would be needed to respond to all the needs. But within the context of their own systems, planners need to explore the possibility of modifying initial and in-service teacher development programmes to include basic training in counselling. They should also investigate the possibility of drawing on the many human support resources found in communities, such as mature community members, young people who are active in anti-AIDS organizations, and above all people living with HIV/AIDS.

5. The complexity of the problems that have been enumerated shows that in responding even to this first facet of the HIV/AIDS crisis, education ministries and their planners should adopt three strategies:

(a) appoint high-ranking officers, at central, regional and district levels, with the necessary authority, supporting personnel, and logistical and financial support, to co-ordinate all that relates to HIV/AIDS, keep the issues at the top of the agenda, and ensure that the necessary information is collected and disseminated;
(b) spur on the brainstorming and research that are needed for finding solutions; and adopt a multisectoral approach, working dynamically with personnel from other ministries, non-governmental organizations, community organizations, and religious bodies; and
(c) ensure that the local level always works closely with communities and families, since these constitute the first and principal line of response to a number of the HIV/AIDS problems, and entrust it with enough authority, power and resources to do so.

The impact of HIV/AIDS on the potential clientele for education

HIV/AIDS affects the potential clientele for education because of:

- the rapid growth in the number of orphans;
- the massive strain which the orphanhood problem is placing on the extended family and the public welfare services;
- the increase in the number of street children;
- the need for children who are heading households, orphans, the poor, girls, and street children to undertake income-generating activities.

The scale of the orphan situation

The most visible demographic impact of the HIV/AIDS epidemic is the growth in the number of orphans. Estimates are that in 34 countries – in Africa (26 countries), Asia (3 countries), and Latin America and the Caribbean (5 countries) – the year 2010 will see 24.3 million children who will have lost their mother or both parents, plus a further 19.9 million who will have lost their father (*Table 4.2*). Almost 70 per cent of the maternal (mother dead) and double orphans will have lost their parents as a result of AIDS. But many of the

paternal orphans (father dead) are likely to lose their mother also within a few years since, if the father, especially the father of a young child, dies as a result of AIDS, the mother will almost certainly also be infected and not have long to live. The most severely affected countries will be Nigeria (with 7.6 million orphans), Ethiopia (with 6.9 million), South Africa (with 3.6 million), and the Democratic Republic of the Congo (3.5 million).

Already, by 2000, it was estimated that 30.3 million had been orphaned in 26 countries in sub-Saharan Africa, considerably more than half of them because of AIDS. These figures can be compared with the 13 million children orphaned in Europe during the 1939-1945 war, or the 440,000 children separated from their families in the 1994 Rwanda genocide. It is projected that by 2010 more than one-third of the children aged below 15 in Botswana and Zimbabwe, and one-quarter of those in the Central African Republic, Mozambique, Namibia, South Africa, and Swaziland will have lost one or both parents, mostly due to AIDS. The projections are at their worst for Botswana, where it is estimated that 36.8 per cent of children below age 15 will have lost a mother or father or both, the greater part of the loss being due to AIDS. In the 34 study countries, one-eighth of all children below age 15 will be orphaned by the year 2010.

The growth in the number of orphans is taxing the coping strategies of families and society at large. In many cases, the extended family is finding it extremely difficult to cope economically and psychologically with the numbers it is required to absorb. Few orphans are able to pay their school or training fees. Many have to care for others in the homes where they live. Many have to work to support themselves or younger siblings dependent on them. Many carry responsibilities well beyond their capabilities as children. Some are so traumatized by what they experienced when a member of their family died of AIDS that they cannot learn. A significant number are at risk of contracting HIV/AIDS through virtually inescapable income-generating prostitution. Most are excluded from the joy and gaiety of a normal childhood. Economically and psychologically, they have needs that differ from those of other children in school, needs to which the school must necessarily respond.

Table 4.2. Orphan estimates, 2010

	Maternal and double orphans from all causes (thousands)	Percentage of maternal and double orphans from AIDS	Paternal orphans from all causes (thousands)	Total orphans from all causes (thousands)	Total orphans as percentage of children below age 15
Botswana	113	96.3	92	205	36.8
Brazil	1,208	72.8	988	2,196	4.8
Cambodia	209	29.8	171	380	6.6
Côte d'Ivoire	778	72.0	636	1,414	16.0
Dem. Rep. Congo	1,912	43.1	1,564	3,476	10.6
Ethiopia	3,774	67.3	3,088	6,862	17.7
Haiti	161	51.6	132	293	10.3
Kenya	746	80.9	611	1,357	11.8
Malawi	553	78.4	452	1,005	21.5
Mozambique	1,219	73.8	997	2,216	26.9
Myanmar	480	26.1	393	873	7.9
Nigeria	4,168	64.1	3,411	7,579	11.5
South Africa	1,970	92.3	1,611	3,581	30.8
Tanzania	1,182	83.2	967	2,149	11.1
Thailand	254	39.8	208	462	3.2
Uganda	1,148	59.1	940	2,088	13.6
Zambia	645	82.4	528	1,173	22.6
Zimbabwe	695	94.6	569	1,264	34.2
Total: 34 study countries	24,291	68.4	19,875	44,166	12.6

Maternal orphans have lost their mothers, paternal orphans their fathers, double orphans both parents.

Source: Hunter and Williamson, 2000, Figure A-6.

Orphan care

The fundamental guiding principle for the care of orphans is that, following the death of one or both parents, they remain within their communities in a family-like setting with an adult guardian or care-giver. This is often accomplished through the extended family: the orphans remain with or are incorporated into a family with which they have blood ties. Ideally, they should also stay with their own sibling group and live in the familiar surroundings of a known community. They should also be party to decisions affecting them and should not be treated either as statistics or virtually as chattels to be disposed of.

The magnitude of the orphan problem has resulted in extensive divergence between the practice and these ideals. Families with meagre resources are not always able to provide for additional children. The result is a dismemberment of families, the separation of siblings from each other, and the 'repatriation' of urban children to unfamiliar rural areas of family origin. Throughout this process, many children risk being orphaned several times over (with all the consequent disruption this means for them psychologically, socially, and physically), as relatives to whose care they were committed themselves succumb to HIV/AIDS.

Although the situation varies between and within countries, the bulk of the evidence shows extensive differences in school attendance rates between orphans and non-orphans. Lower proportions of orphaned children commence school. Higher proportions of children who were orphaned while attending school drop out of the system, without completing the relevant school cycle. In addition, anecdotal evidence from teachers indicates that orphaned children who remain in school may be at a disadvantage – they can be identified because they look thin, do not have pencils or exercise books, do not wear the full school uniform.

The dynamics of adjusting to the orphan situation leads to two situations, at opposite ends of the age range, which have an adverse impact on orphans' ability to participate in and/or draw profit from schooling. One is the tendency to place orphaned children with their

grandparents. These may be too old to give young children the care they need, to provide for their material needs, to meet the costs of schooling, and to exercise the control needed to ensure school attendance and attention to school-work.

Child-headed households

At the other end of the scale, it can be that the extended family no longer has the capacity to absorb more orphans, or that the orphaned children resist efforts to separate them from one another. This leads to the establishment of households that are headed by minors. Some countries with a mature and extensive AIDS epidemic, report that between 5 and 10 per cent of households are headed by children below the age of 15. Meeting the basic learning needs of children from such child-headed households poses grave problems. Regardless of international conventions on child labour, the head of such a household and many of the younger siblings must work to sustain themselves. They are not free to attend school and what they earn from their work (often pitifully small, because as children they cannot demand or negotiate for more) is not sufficient to meet their needs for food, clothing, accommodation, and necessary medicines, let alone education.

Street children

The number of street children is also increasing rapidly. Street children include children of the street (those who live, work, eat and sleep on the street) and children on the street (those who work on the street but go home to their families at the end of the day). Poverty and family disintegration, due to death and divorce, are the major factors leading to children being on the street. The family structures that should have supported them have collapsed, frequently because of HIV/AIDS, leaving them with no choice but to have recourse to the streets to support themselves. Their counterparts in rural areas are children from HIV/AIDS-affected families, who do not attend school because AIDS care has absorbed the meagre family resources, leaving nothing for school fees.

The challenge to educational planning

The orphans' situation which the HIV/AIDS epidemic leaves in its wake poses almost intractable problems for education and for the wider society. The scale of the question is gigantic and, as can be seen from *Table 4.2*, the stage seems set for it to grow exponentially. Although heroic attempts are being made by individuals, communities and agencies to come forward with solutions, the sheer size of the problem, and the fact that there is no end in sight, make it very difficult to know which way to turn. Never before in its history has the human race experienced such a problem. Never before have educational planners faced so daunting a challenge.

Educational responses cannot be separated from those in the wider social sphere. Hence the planner must remain aware of and learn from the coping strategies devised by families and communities. It is very sobering to recall that with few exceptions the extended family and community structures have responded magnificently to the orphan crisis, coping with it almost as part of their normal routine. A proverb from West Africa is applicable: 'the tortoise knows how to make love with its mate'. What seems virtually impossible to outside agencies is being dealt with almost as a matter of course by families and communities. The best-designed education plans will learn from these community responses. Moreover, they will take it as a guiding principle that their first obligation is to strengthen the capacity of families and communities to care for their orphaned children.

This means that the educational planner must be open to thousands of small, piecemeal solutions – possibly as many solutions and coping strategies as there are communities. The tidy neatness of a centrally designed uniform system must give way to a jumbled clutter of school types and educational arrangements, none conforming to previously known models, each responding to the specific needs of the communities which have originated them. Order, classification and structure must yield to what might seem like anarchy, but in reality is 'planned chaos'.

Supporting such a plethora of community responses means, of course, that the planner must ensure that they receive their equitable

share of national resources. Although the educational responses may be largely community-originated and community-based, this does not mean that the state can wash its hands of its obligations to provide financial support, particularly since the individuals in question are likely to be among the poorest and most vulnerable in society – the orphaned children of the poor. The planner must also resist the inclination to 'take over' the community responses by incorporating them into the traditional school system. In their own good time, they may develop into something more coherent and organized. But until that time arrives, the planner's role is to support, to learn, to encourage initiative and innovation, to respect – and to be grateful that communities are succeeding where education ministries fear to tread.

A specific task in all of this is for the educational planner to help in mobilizing the bursary support and counselling services that will be needed to ensure the participation of orphans, whether in regular schools or in whatever kind of new type of educational outreach may be designed for them. This entails a great deal of advocacy work, a task that depends heavily on an adequate understanding of the scale of the problem and its ramifications. And this in turn points to the need for a good orphans-related database which will spell out the basic facts on their number and composition by age and gender, their participation in school or other educational programme, their progression and persistence, and their performance. Enlightened by this information on the scale of the problem, policy-makers and planners will then have to decide on the priority to give to orphan support when allocating national resources and when presenting their requirements to aid and support agencies.

It should be clear that the educational planner and the education ministry cannot accomplish all these tasks on their own. As pointed out above in another context, there is need for multisectoral involvement, with a very special role being played by civil society and community-based organizations.

One final and almost unanswerable question must be raised about orphans and how the education system can respond to their needs. The basic problem is not that of getting them into schools or educational

programmes. The basic problem is not even ensuring their survival within extended families and communities. The really basic issue is the kind of adults they will grow up to be. An enormous number will have been cheated of their childhood. From a very early age they will have been 'juvenile adults'. They will have been catapulted from infancy or very early childhood into adult status and responsibilities without passing through the formative years of a normal childhood. They will not have known the love, security and stability within which the human personality normally develops. Some will have known little more than the company of a very much older generation, some only the company of those who are inexperienced children like themselves. Some will have moved from one surrogate parent to another. Some will have been almost forcibly separated from the only stable focus they have known in their lives, their own siblings and the familiar surroundings of the place where they were reared.

Can the education they receive compensate for this absence of normal human upbringing? Can it help to ensure that when they pass to full adult status these 'juvenile adults' will do so as mature individuals, capable of founding and sustaining a family? HIV/AIDS and the resultant orphan crisis are too recent an experience to be able to answer these questions with any certainty. But perhaps the questions point to the need to ensure that all educational programmes compensate orphans for what they have lost in life, that they provide them with security, stability, affection, human warmth, and an opportunity for joy, gaiety and laughter.

The impact of HIV/AIDS on teachers, teaching and the supply of education

HIV/AIDS affects the supply of education because of:

- the loss through mortality of trained teachers;
- the reduced productivity of sick teachers;
- the reduction in the system's ability to match supply with demand because of the loss, through mortality or sickness, of education officers, inspectors, finance officers, building officers, planning officers, management personnel;

- the closure of classes or schools because of population decline in catchment areas and the consequent decline in enrolments, or because of teacher loss.

There are at least four dimensions to the impact that HIV/AIDS has on teachers and teaching: teacher infection and mortality, teacher productivity, teacher costs, and teacher stress.

Teacher infection and mortality

There is a scarcity of good information on teacher infection and mortality, but the little that is available shows that the current cadre of teachers constitutes a high-risk group in several countries. Early World Bank projections were that by 2010, 14,460 teachers would have died from AIDS in Tanzania, with the number mounting to 27,000 by 2020 (World Bank, 1993, p. 69). Actual HIV testing of teachers and office workers in Zambia in the early 1990s found that the levels of infection were strikingly high relative to other groups. Seven years later, the almost inevitable outcomes of this finding materialized: teacher mortality in Zambia stood at 39 per thousand, being about 70 per cent higher than in the general population. The number of teacher deaths in Kenya rose from 450 in 1995 to 1,400 in 1999, with HIV/AIDS being the major contributor to the increase. By 1999, Malawi and Côte d'Ivoire were losing at least one teacher per day to AIDS, while Botswana was losing between 2 and 5 per cent of its teachers each year. An estimate for South Africa is that, with a teacher infection rate of 20-30 per cent, some 88,000 to 133,000 teachers will have died by 2010.

The apparent vulnerability of currently serving teachers may be due to their status and their conditions of service. As a group, they are better educated than the general population, their income level is higher (notwithstanding their low salaries), and their mobility is greater. In the 1980s and 1990s, before the dynamics of HIV transmission were well understood or disseminated, relative affluence and greater mobility tended to increase the risk of infection. It is possible that this risk has decreased for new recruits to the teaching profession, but in several countries the bulk of serving teachers may be experiencing infection rates that are higher than those in the general adult population, and

hence higher proportions of them may die in the coming decade from AIDS-related causes.

Teachers who die have to be replaced – if a replacement is available. Occasionally it may be possible to find a temporary replacement among retired teachers, but this is rare enough. The more commonly adopted strategy is to wait for the annual output from the teacher-training institutions and in the meantime either to seek the services of an unqualified teacher or to do without, spreading the load among others in the school. But there is a limit to the applicability of this strategy. The training institutions are usually designed to produce enough qualified teachers to cover projected retirements, some expansion or contraction as the case may be, and general loss due to known rates of mortality and occupational mobility. The high rates of AIDS-related deaths may raise the demand for new college graduates (whose numbers may also have declined because of high death rates among students) above the supply, prolonging the dependence of schools on unqualified teachers. This appears to have happened in the Central African Republic, where, in mid-2000, UNAIDS reported widespread closure of schools because so many teachers had died of AIDS-related illnesses. In Zambia in 1998, teacher deaths were equivalent to the loss of about two-thirds of the annual output of newly qualified teachers from the training institutions; when taken together with retirements and teacher departures from the system, there was no net gain in a system which is still expanding.

At higher levels of the education system, the numerical losses due to AIDS are further complicated by losses in specialization. Teachers and lecturers in secondary schools, training institutions and universities are as vulnerable to HIV/AIDS as their colleagues in primary schools. Indeed, the current cohorts may be even more vulnerable, since, like their primary-school counterparts, they reached their current professional status in the 1980s and early 1990s, but unlike them rose to even higher educational levels, a factor which at that time was associated with considerably higher risk of infection. Because those at higher levels tend to be more highly specialized, replacement problems are greater. It may not be possible to find staff who can cover the subjects and disciplines needed in secondary schools

and colleges. This points to the wisdom of equipping those training to become secondary school teachers with expertise in at least two subject areas. At the higher levels of teacher and vocational training institutions, such multi-disciplinarity is not always possible. This means that certain subject areas would have to be discontinued, unless preparations were made for such an eventuality by training directed at widening the expertise base of existing staff.

The first planning implication here must relate to keeping the system functional in the face of high teacher mortality. There are numerous short-term stop-gap measures which can be considered: engaging retired or locally available professionals, teachers or others; employing unqualified teachers; taking on teaching assistants for supervisory duties so that qualified teachers can take on more actual teaching; combining classes, either into large classes on a monograde system or for some form of multigrade teaching; spreading the teaching load among the available teachers; more actual teaching on the part of the school head and other senior staff; shortening the teaching time for certain (or all) subjects, thereby enabling teachers to reach more pupils; turning to students for various forms of peer teaching. In evaluating these and other possibilities, it will be necessary at all times to consider the impact the chosen measures might have on the school's core work of promoting student learning. If this is not being achieved, there may be the semblance of a functioning system, but this will be in the externals only.

There is also need to ensure that sufficient replacements are being trained. An assessment of the impact of HIV/AIDS on the education sector in Swaziland estimates that for every one teacher expected to be needed in the absence of an AIDS epidemic, 2.2 would in fact be needed to respond to the impacts of the disease (Swaziland, Ministry of Education, 1999, p. 50). If the existing training model were to be relied on to produce these, it would have to be more than doubled in capacity and output. Because this is virtually impossible, alternative training strategies have to be devised, with a larger and faster output. But putting such strategies in place may encounter problems in sourcing trainers who are sufficiently qualified, flexible and HIV-free to mount radically different and sustainable teacher-training programmes.

Teacher productivity

Writing about the effect of HIV/AIDS on the supply of educational services, Goliber (2000, p. 27) notes that "though mortality represents the final outcome, it may be that morbidity resulting from AIDS takes the higher toll." This is because of the course that HIV infection normally follows. After several years of apparent health, the infected person begins to experience a series of illnesses. Initially these may be of short duration, but they generally tend to become progressively longer. In between these episodes, the individual seems to have returned to normal health, but this belies the fact that within the immune system the HIV virus is becoming ever more dominant. There may be 10 to 14 of these bouts of illness before the individual's immune system becomes so weakened that it can no longer ward off opportunistic infections. This marks the emergence of full-blown AIDS.

Given this scenario, recurring bouts of illness lead to infected teachers being frequently absent from school long before they develop full-blown AIDS. When clinical AIDS sets in, their participation becomes even more uncertain, until eventually they are no longer able to teach. A conservative estimate is that an infected teacher loses the equivalent of six months of professional working time before developing full-blown AIDS, while on the average about one year lapses between the onset of clinical AIDS and death (Goliber, 2000). On this basis, each AIDS death is preceded by the equivalent of 18 months of disability, during which teacher involvement in school activities becomes progressively more impaired or is at a very low ebb.

The erratic school attendance of infected teachers before they develop full-blown AIDS means a lowering in their productivity. During their periods of illness, their classes receive little or no teaching. As their health declines, many may have to reduce their teaching load. The despondency that an awareness of their condition engenders reduces the vigour of their teaching work and makes them disinclined to trouble themselves with lesson preparations, homework correction, or co-curricular activities. Finally, in the last six to twelve months of their lives, as they become increasingly incapacitated by full-blown

AIDS, they can no longer discharge professional responsibilities in any meaningful way. Though still counting as members of a school staff and of the teaching profession, their actual productivity peters out.

There are further productivity losses when it becomes necessary, on medical grounds, to post chronically ill teachers near to hospitals, properly staffed clinics or medical centres. This means that they must live in or near towns and urban centres, but not in remote rural areas. This exacerbates, at least on paper, the urban-rural gap, with trained teachers being heavily concentrated close to urban centres, while rural schools are denied their full and fair complement. The urban posting of these teachers does little, of course, for the work in the urban schools, since many are too ill to assume a full teaching load or to guarantee some continuity in their teaching.

AIDS-related illnesses in the family or community, and AIDS-occasioned funerals, can also reduce a teacher's capacity to put in a full day's work. These lead to absences from work, late-coming, knocking off early, and a reduction in the time available for professional activities. Illness in the family may also result in the teaching and professional inputs of female teachers being lower than those of male teachers. Thus, in several countries, school heads have reported that they experience more problems with female than male teachers in terms of late-coming and requests to leave work early.

Teacher costs

Apart from distributional issues, the wasting loss of serving teachers has grave financial repercussions on the education system. Since conditions of service normally provide for an extensive period of sick leave for a teacher who is ill, the system must needs carry a large number of non-productive persons. In addition to the high salary costs this implies, there are also the financial costs of replacements, both in the short term through the hiring of part-time substitutes and in the long term through the training of additional teachers. There are also the lost costs of the infected teacher's initial training at public expense as well as the unquantifiable loss of valuable experience.

A management problem arising from the silence and stigma that attach to AIDS is that good information does not exist on the number of teachers who are HIV-infected, on the extent of AIDS-related absenteeism, or on the number who have progressed to full-blown AIDS. This blurred picture makes rational planning for teacher numbers and cost-effective deployment extremely difficult. As will be seen below, there is urgent need to develop and maintain an epidemic-related management information system that will respond to the need for timely, comprehensive, reliable and up-to-date information in this and other areas.

Teacher stress

Teachers are also deeply affected personally by the incidence of HIV/AIDS among their relatives and colleagues, and by their fear and uncertainty about their personal infection status. Though these are major causes of concern for them, they are areas in which they may receive little support. Thus, it has been found that less than one-third of a sample of teachers who had experienced AIDS sickness or death among their relatives had talked about the problem with friends or relatives (UNICEF, 1996). The remainder felt either unable or unwilling to do so. Similarly, a survey to ascertain teachers' knowledge, attitudes, practices and skills in the teaching of HIV/AIDS found that "approximately 25 per cent of the teachers admitted to worrying about their own HIV status, and nearly 40 per cent would like to talk to somebody about their own HIV/AIDS related problems" (Siamwiza and Chiwela, 1999, p. 11). The unresolved HIV-related stresses which teachers experience, in the classroom and at home, need to be acknowledged in initial and ongoing teacher training. If these remain shrouded and unmentionable, unnecessary anxiety will affect the teacher's life and work. It will also be that much more difficult for the teacher to incorporate HIV/AIDS issues into teaching encounters in a way that will enlighten students and help them to adopt behaviour that will protect them against the likelihood of infection.

V. HIV/AIDS in relation to content, process and organizational aspects of education

The impact of HIV/AIDS on the content of education

HIV/AIDS affects the content of education because of:

- the need to incorporate HIV/AIDS education into the curriculum, with a view to imparting the knowledge, attitudes and skills that may help to promote safer sexual behaviour;
- the need to develop life-skills which equip pupils for positive social behaviour and for coping with negative social pressures;
- the need to establish a vigorous human rights approach;
- the need to bring HIV and AIDS issues out into the open;
- the need for earlier inclusion in the curriculum of work-related training and skills, so as to prepare those compelled to leave school early (because of orphanhood or other reasons) to care for themselves, their siblings, their families;
- the need to adjust educational content to cater for the skills society is losing through HIV/AIDS.

The inclusion of HIV/AIDS education in the curriculum

The most obvious impact of AIDS on the content of education is the incorporation of HIV/AIDS, reproductive health and life-skills education in the curriculum with a view to bringing about behaviour change. An earlier chapter has dealt with the curriculum aspects of this innovation. What remains here is to consider two resultant planning questions.

The first is to determine the most appropriate and effective way of placing this subject area within the curriculum. There are three options:

1. The separate subject approach, where HIV/AIDS and reproductive health are designed as a free-standing separate subject. This mode ensures that the subject is clearly identifiable and manageable. It can also ensure that it receives sufficient emphasis. There is the further advantage that this allows HIV/AIDS and sexual health to be given a high profile as an examinable subject, thereby capitalizing on the power of examinations to drive the desired learning.
2. The carrier subject approach where HIV/AIDS and reproductive health become an integral part of an existing carrier subject (such as Health Education). The difficulty with this approach is that the new areas will receive only as much emphasis, from learners and teachers, as attaches to the carrier subject. There is also some possibility that the new areas might lose their identity within the carrier subject.
3. The integration approach where HIV/AIDS and reproductive health are taken to be cross-cutting issues to be addressed in all subject areas and become examinable as part of those subjects. In this approach also there is some risk that the new areas would lose their identity. There is the further risk that being part of every subject, they would receive adequate treatment from none and would not go beyond knowledge aspects.

The second management and planning issue in this field concerns the central role teachers must play if effective life-skills and reproductive health programmes are to be established within schools. This heavy dependence on teachers points to what tends to be a weak aspect of well-conceived programmes – their failure to take adequate account of the situation prevailing on the ground in terms of:

- the inadequacy of teacher knowledge and confidence;
- teacher embarrassment in treating of sexuality issues with the young and with those of the opposite sex;
- teacher concern about lack of preparation to teach in the areas of HIV/AIDS, reproductive health and psycho-social life-skills;
- the reluctance of teachers who are aware that they, or members of their families, are HIV-infected to teach something which is so painfully close to home;

- teacher feelings that this 'is not what education is about';
- teacher anxiety that in dealing with sexuality and sexual behaviour they would break traditional taboos and offend parents; and
- the low credibility teachers may have because of their own high level of infection.

The educational planner who wishes to respond to these concerns must arrange for:

1. extensive pre-service and in-service training of teachers to enable them to teach HIV/AIDS, reproductive health and psycho-social life-skills correctly and in participative ways that have potential to impact on student attitudes and behaviour;
2. the development of manuals aimed at improving teacher knowledge and teaching competence in these areas, and of a wide variety of teaching materials for use at different school levels; and
3. an extensive advocacy programme that will speak to all stakeholders, but in particular will win over the support of parents, churches, and traditional leaders.

A human rights approach

Human rights and HIV/AIDS issues are intimately connected. "An environment in which human rights are respected ensures that vulnerability to HIV/AIDS is reduced, those infected with and affected by HIV/AIDS live a life of dignity without discrimination, and the personal and societal impact of HIV infection is alleviated" (UNAIDS, 1998a, p. 5). The education system has a responsibility to protect the human rights of each one of its members, from the highest-placed official down to the lowliest employee or the youngest schoolchild. Educational institutions likewise have a responsibility to ensure that the human rights area maintains a high profile in the full range of their curricular and co-curricular activities.

Education managers and school officials need to ensure that they do not fall into the trap of denying access to HIV-infected students, because of their HIV status, because of pressure from the parents of non-infected students, or because their HIV status makes it difficult

for the students in question to meet attendance requirements or pay educational costs. They must also ensure that they do not unreasonably restrict the participation of infected students in certain curricular and co-curricular activities.

Education officials at all levels must also ensure that they protect the rights of HIV-infected teachers and other employees, while school authorities should strive to protect students from witnessing some of the more humiliating effects of HIV/AIDS in teachers and other employees. But this must always be done in a way that increases and does not demean the dignity of the affected individual. No matter how troublesome their illness, teachers and other education employees maintain their rights as human beings. Schools and the entire education system need to be constantly on the alert to ensure that these rights are not violated and that infected teachers and other employees can exercise such rights as those to health care, employment, privacy, companionship, association with others, and accommodation. The rights of an infected individual – teacher or student – also include the right to work, so long as this remains possible for and is desired by the person concerned.

Education ministries and teaching and research institutions need to develop and implement provisions for dealing with these and other aspects of human rights and education. They should also develop clear guidelines for use by schools and colleges.

At the school level, the curriculum for social sciences, religious education and other disciplines that deal with human rights needs to be extended to include HIV/AIDS applications, such as the right to marry and found a family, the right to privacy, the right to work, the right to expression and information, and the right to the highest attainable standard of physical and mental health. This can also find expression in efforts to bring HIV and AIDS out into the open, to contribute to breaking the silence, the secrecy, the stigma, the shame that are associated with AIDS. HIV/AIDS in itself is a calamity for an individual, a family, a community. It does not need the inhuman response of aggravating it through stigma, silence and shame. Through its sexual health and HIV/AIDS programmes, through equal treatment

for all its members, through vigorous action against petty hole-in-the-corner teasing and bullying of those infected or affected by the disease, through arranging for people living with AIDS to address the school community, through role-playing and drama presentations that bring HIV/AIDS out into the open, through consistent manifestation that it is ashamed of the shame itself, the school can counter the silence and reduce the stigma and discrimination surrounding HIV/AIDS. By doing so, it moves the response forward.

The inclusion of work-related and training skills in the school curriculum

Responding to the impact of HIV/AIDS necessitates re-examination of the school curriculum in the light of the economic responsibilities that so many students are required to shoulder at a very young age. Old questions of vocationalizing and diversifying the curriculum must be re-visited, not perhaps from a central viewpoint but at the level of the educational institution which wants to provide a relevant curriculum for children who are heading households, to draw in and engage children from the street, to equip students with skills that will make it unnecessary for them to turn to prostitution or crime as means of support. HIV/AIDS has created a social and educational climate that differs starkly from that obtained when educational thinkers and planners closed ranks in defence of the primacy of the school's academic role. The new climate needs new thinking and a greater responsiveness to the income-generating needs of its clientele, needs which children experience as a present reality, not as a future possibility.

Adjusting educational content to cater for the skills lost by society

Where the very functioning of society is being undermined through the relentless erosion of skilled and experienced human resources, as is happening through HIV/AIDS, the education sector must ask what its response should be. Flexibility and versatility should rank higher than ever before in its curriculum objectives. Close interaction with human resource planners will identify areas of skill and expertise that the epidemic is depleting and that must be replenished. While the immediate need for adjustments may well be in the areas of higher

education, there will be knock-on effects for education programmes in secondary and primary schools. In certain circumstances, much closer co-operation between industry and schooling may be needed, so that at a very early age young people acquire the skills and can start building up the experience that AIDS has removed.

Because the lead-in time for interventions of this nature tends to be long, policy-makers and planners should give early attention to these questions. They should also ensure that they work closely with their counterparts from other sectors, so that collaboratively they develop a comprehensive policy for responding to the emerging human resource needs of the AIDS-stricken society. The greatest mistake would be to defer preparing for the inevitable loss of human skills until sections of society had begun to flounder and could no longer function.

The impact of HIV/AIDS on the process of education

HIV/AIDS affects the process of education because of:

- the new social interactions that arise from the presence of AIDS-affected individuals in schools;
- concerns about the high infection rates found in teachers;
- the erratic school attendance of pupils from AIDS-affected families;
- the erratic teaching activities of teachers, who are personally infected, or whose immediate families are infected, by the disease.

HIV/AIDS in a school

The presence of HIV-infected individuals in a school affects social interactions in the institution itself and in the surrounding community. The relationship of students to one another or to their teacher is affected when it becomes known that a student or teacher is suffering from AIDS. In some cases there might be parental objections to the continued presence in school of an infected student or teacher. Where this occurs, the school authorities and the parent-teacher association need to be firm in their stance against any form of discriminatory

treatment. At the same time, they have a responsibility to educate and sensitize the objectors so that the opposition is withdrawn. In this, they need the clear support of higher-level policies and decisions that protect the rights of HIV-infected students, teachers and other school staff. They also need carefully worked-out procedures, guidelines, information sheets and posters that clearly differentiate no-risk situations from those where there is risk of infection. Further, there is need for protective but non-discriminatory system-wide guidelines on school activities – such as certain laboratory exercises, food preparation in home economics classes, or group sports activities – which might lead to blood-spilling and thereby to possible infection.

When a member of the school community begins to show the signs of AIDS, others in the group can be motivated by a mixture of fear, bewilderment and dismay. They fear infection, they are distraught at the rapid changes they see occurring. Conflicting emotions may lead to the affected individual being isolated and possibly excluded from peer groups. They can also lead to patronizing and condescending attitudes which leave a further scar on the infected person. In addition to the social encounters, the entire teaching and learning process may be affected when students witness the rapid physical deterioration of a classmate or teacher with full-blown AIDS. Trauma arising from experience of the way AIDS can incapacitate and humiliate a fellow human being, especially when this occurs in school surroundings, can have a shattering impact on a young person's psychological stability and learning capacity.

There can be few rules or regulations appropriate to such situations. Nevertheless, the entire education system should ensure that it never defaults in its responsibilities to persons living with HIV/AIDS. It should alert every responsible officer, every teacher, every student to the need for sensitivity, understanding and delicate thoughtfulness. It should take whatever actions are needed to ensure that members of a school community who live with the disease can live full, productive and happy lives.

Process impacts of teacher infection rates

Reference has been made in earlier pages to the high infection rates experienced by the current cadre of teachers who received their training before the mid-1990s. Apart from the losses to which it is leading, this has affected the process of education in at least two ways:

1. Because they have seen so many teachers suffering from AIDS, students profess scepticism about teachers as purveyors of HIV-prevention messages. This is a somewhat pitiless judgement, since it overlooks two facts – that those who are infected may be specially well-equipped to bring warning messages to others, and that the majority of teachers are not infected. Nevertheless, this apparent lack of teacher credibility has resulted in some HIV/AIDS and reproductive health education programmes failing to achieve their objectives. Programme designers and curriculum planners need to address this issue candidly if they are to capitalize on the resources inherent in teachers.
2. Communities may regard teachers as being responsible for the introduction and spread of HIV/AIDS. This is especially true in rural areas where an assured income identifies a teacher as a person of relative affluence who is able to pay for sexual favours. Related to this are the frequent allegations that some teachers exploit their students by having sexual relations with them. Though often exaggerated, the reports may be sufficient to tarnish the image of the generality of teachers and to see them being blamed as the source of HIV/AIDS in a community. The HIV/AIDS crisis heightens the importance of community participation in school affairs but unfortunately relationships between the school and community may be strained by these concerns about the sexual integrity of the teachers.

HIV/AIDS leads to a disjointed teaching-learning process

A final issue is the way HIV/AIDS disturbs the continuity of teaching and learning. If the teacher is infected, there are the interruptions due to the recurring bouts of illness. If the infection is in the teacher's family, hours and days spent in patient care, or in seeking

medical and other care, mean hours and days lost to teaching. This is especially so in the case of female teachers on whom the burden of care falls more heavily than on men. If there are funerals, school may have to stop altogether, or a given teacher may have to be absent from duty for several days. The attendance of students from AIDS-affected families may be equally erratic. In all cases, the outcome can be such a disjointed teaching and learning situation that there is little real opportunity to provide for student learning needs. Lack of continuity and spasmodic learning experiences do not allow students to incorporate and make their own what they have been exposed to. It is of little surprise then that there are so many reports of low levels of learning achievement.

Given the extensiveness of the HIV/AIDS epidemic and the way it is impacting on teachers and communities, it seems almost inevitable that the teaching-learning situation will continue to be characterized by irregularity and discontinuity. Determining how worthwhile education can take place in such circumstances is one of the challenges that face the planner. One response might be more liberal provision of learning materials and textbooks, with students being allowed to take these home, so that some learning might continue in school if the teacher was absent, or at home if the pupil could not attend. Another response could entail more systematic reliance on peer teaching, student to student, and on groups of older students being responsible for more junior groups. But clearly, more sweeping, though as yet unidentified, measures are needed.

The impact of HIV/AIDS on the organization of education

HIV/AIDS affects the organization of education because of the need to:

- adopt a flexible timetable or calendar that will be more responsive to the income-generating burdens that many students must shoulder;
- provide for orphans, for children from AIDS-infected families, and for children who are themselves AIDS-infected, for whom

normal school attendance is impossible, by bringing the school out to them instead of requiring them to come in to some central location;

- make dramatic changes in the way student responsibility is developed;
- examine assumptions about schooling, such as the age at which children should commence, or the practice of bringing together large numbers of young people in relatively high-risk circumstances.

Flexibility in educational provision

Characteristically, formal educational provision tends to be quite inflexible. It is further characterized by considerable uniformity. The daily schedule for beginning and ending classes, the timetable for each day's learning and co-curricular activities, the calendar for the school year, the basic organization of the teaching and learning process, the content of what is studied throughout a region, sometimes the very time of day at which particular subjects (and even specific items within those subjects) are studied – all tend to be similar in a country, state or province. All tend to be regarded as sacrosanct, virtually immutable, unchangeable once decided upon from the top. All serve the bureaucratic need for control, information and supervision. But all do not necessarily serve educational needs, particularly in an environment that is experiencing the overwhelming disruptive effects of HIV/AIDS.

What the AIDS situation calls for is greater flexibility in every aspect of educational provision – daily schedule, calendar, curriculum, organization, technology of presentation. Already this need has led to the development of more flexible models in some countries. Thus, community schools (in Burkina Faso and Zambia, for instance) operate on a more flexible timetable and can be more accommodating to the special needs of orphans, street children and those whom AIDS-related causes have induced to abandon the normal school system. These schools have also developed their own curricula that are immediately responsive to the identified learning needs of their students.

The needs of orphans, of children from HIV/AIDS-infected families, and of children with AIDS are also calling in question the

traditional frontal teaching technology. In this, one teacher faces – very often, quite literally – a class of 35 or more pupils in a dedicated and appropriately furnished room. This approach may have been satisfactory when conditions were stable and crisis conditions did not prevail (although it should be noted that the escalating costs associated with this technology are driving investigations into more economic ways of reaching students). But it was not suitable in all circumstances – for instance, reliance on this methodology has effectively excluded many children with special educational needs from the benefits of a formal education. Likewise, it is not always suitable when striving to adjust to the impacts of HIV/AIDS. The traditional 'class plus teacher in a school building' model does not meet the needs of children required to provide home-care for sick relatives and/or siblings or to generate the income needed for survival. Neither does it respond to the needs of those whose experience of AIDS-related illnesses or deep psychological trauma prevents their participation in school as traditionally known. But all of these retain their basic human right to education. Their number is great. Somehow the education sector must seek to re-organize itself so that it can provide for their rights.

Enhancing student responsibility

Almost all HIV-prevention programmes have the objective of helping students to behave more responsibly. Thus, a training programme for Namibia justifies its approach because

> *Young people need to be able to think for themselves and take responsibility for their future. They need to be responsible for their own development. Young people have the courage and confidence, and with the skills and a supportive environment they will be able to protect their future (Namibia, Government of the Republic of, 1999, p. 1).*

The desired responsibility is to be shown by managing personal sexual behaviour in ways that remove the risk of HIV infection.

It has been noted, however, that instead of supporting the development of student responsibility, the culture of schools may actually work in the opposite direction. "There is a clear conflict

between the institutional context for delivering the message of 'responsible behaviour' and the absence of responsibility in the lives of young people" (Cohen, 1999, p. 6). In HIV/AIDS education programmes (and others), students are urged to take responsibility for their future, and to act responsibly. But in the ordinary running of the school they are denied the opportunity to do so. Instead, all of their affairs are managed for them and decisions are made on their behalf – by the school management, teachers, rules and regulations, and the entire apparatus of the school culture. As Cohen trenchantly remarks, "it is unsurprising, therefore, that suggestions that young people act responsibly in their sexual lives fall on deaf ears".

The logical conclusion is inescapable:

- if students are to escape HIV infection, they must act responsibly in their sexual lives;
- since acting responsibly in their sexual lives is only one facet of responsible behaviour, students must learn to act responsibly in other critical areas of their lives;
- acting responsibly in other critical areas of their school lives necessitates real (not just nominal) and effective student participation in school governance and in all decision-making that affects them.

In other words, mature responsibility for the management of their sexuality can be developed only when students experience real scope for the development of all-round responsibility for what affects them.

The implications are clear. If students are to learn to behave responsibly in sexual areas – if the objectives of admirable HIV/AIDS prevention programmes are to be met – the organization of schools and the entire education system must be shaken up to allow for their real and effective involvement. In terms of age they may seem to be children; in terms of treatment they must be regarded as adults. Here, as in other spheres, responding to the HIV/AIDS imperatives demands a radically new approach.

Examining unquestioned assumptions

Educational provision is premised on a number of assumptions which are rarely questioned: formal education should begin at a relatively young age, it should cover the years of childhood and early adolescence, it should be effected by assembling large groups of children in purpose-designed buildings for a limited period each day, it should be responsible for these children while they are on the school premises but have no effective responsibility for what happens to them while on their way to or from the school.

HIV/AIDS makes it necessary to look critically at some of these assumptions, or at least to take account of some of their associated dimensions. Relevant factors include the following:

- children engage in sexual practices at a very young age;
- in all parts of the world the age of sexual debut (first sexual encounter with another) has fallen;
- between the ages of 11 and 13 the majority of children become very aware of their emerging sexuality, but few of them have received any guidance on how they should manage this; yet, in almost every country, most of these children are attending school;
- in developing countries, and particularly in rural areas, children tend to begin school at widely different ages, leading to the presence in a class of a widely disparate group in terms of sexual development, knowledge and practice;
- grade repetition also leads to many children being older than the norm for their class;
- where schools are far from children's homes, children are in danger of sexual exploitation from adults who may offer them motor-car lifts or who have become familiar with their preferred walking routes;
- when travelling to or from school, children may engage in sexual experimentation with their school-mates.

All of this amounts to gathering together large numbers of immature young people in relatively high-risk circumstances. Given the ease and irreversibility of sexual HIV transmission, it seems unethical that

this should be done unless special precautions are taken. The minimum precautions the school can take are to equip its students with:

- essential knowledge about their bodies, sexual health, pregnancy, STDs and HIV/AIDS;
- the skills to resist peer pressure and adult coercion;
- the skills to delay sexual intercourse;
- the skills to protect themselves against HIV infection;
- the perception of the value of open communication with trusted adults or peers; and
- knowledge about role models and identity figures who have successfully managed their sexuality.

Education along these lines should begin from the child's earliest days in school. It would be a mistake to defer it until the child is approaching puberty or adolescence.

Education policy should be clear on the need for interventions of this nature, should protect teachers who provide them, and should ensure the development and dissemination of the necessary teaching materials.

The impact of HIV/AIDS on the role of education

HIV/AIDS affects the role of education because of:

- the gradually emerging role of schools as the locus for sexual and reproductive-health education;
- the need for a new image of the school as a centre for the dissemination of messages about HIV/AIDS, not only to its own students, but also to the entire education community, and to the wider community which it serves;
- new counselling roles that teachers and the system must adopt;
- the need for the school to be transformed into a multi-purpose development and welfare institution, delivering more than formal school education as traditionally understood.

The school as a locus for sexual and reproductive health education

Because of HIV/AIDS, the role of the school appears to be changing. Traditionally, there were very high expectations that schools would educate the whole child across the broad spectrum of the intellectual, social, moral, aesthetic, cultural, physical and spiritual domains. In practice, most schools found this impossible. Instead, they concentrated on only a few of these areas, and gave the greatest emphasis in their curriculum to intellectual development.

With the introduction of HIV/AIDS and reproductive health education, this is changing. Schools have begun to enter a new arena, one which in the past was taboo for them (and which many parents and communities consider should still be taboo). Increasingly, the school is seen as having a major role to play in fostering sex-related attitudes and in inducing behaviour patterns that will protect against HIV infection. In theory, this role belongs with parents, but in the majority of countries parents shun or do not adequately discharge their responsibilities in this domain. Some societies make provision, through periods of seclusion and initiation, for young people to learn about adult responsibilities and expectations. In few, however, is there any explicit treatment of HIV/AIDS and its prevention. With neither parents nor society's structures addressing behavioural practices and attitudes, the burden is gradually being transmitted to the school to do so.

This emerging new role for school education requires answers to certain questions:

- what balance will there be between intellectual development (the school's traditional function) and purposeful affective development (as implied by the requirement to influence behaviour in favour of HIV prevention)? In families, when resources are scarce, survival needs take precedence. HIV prevention is clearly a survival need for many societies. Will it take precedence?
- what steps will be taken to prepare teachers for these new responsibilities and to support them as they contend with this sensitive area in human relations?

- how can parents, communities, religious bodies and others be reassured that the introduction of sexual and reproductive health education is designed to fortify and not to undermine the morals of the young, and who will see to it that this is done?
- how can parents, communities and responsible adults be induced to become involved as partners with schools in providing this form of education?

As has already been noted, teachers themselves must undergo a learning process if they are to be successful in teaching about HIV/AIDS and sexual health. Given the scale of the problem, this can be effected only within the school. Hence the school becomes a centre for the dissemination of messages about HIV/AIDS, not merely for its students but also for its staff. There is no reason why the process should stop there. Industry invests considerable resources, mostly by way of staff time, in educating its staff about the disease. Schools could learn from this, extending their educational services in this domain to non-teaching staff, to the families of teachers and other school staff, and ultimately to the members of parent-teacher associations and their dependants. These forms of outreach are necessary for the gradual elimination of new HIV infection in the school's catchment community. They would also be beneficial in reducing the negative impacts of family illness on school functioning and in establishing a more united collegial atmosphere in the school.

Counselling

The advent of HIV/AIDS necessitates psychological support for the children from affected families. The most valuable source for this is the informal support that comes from the nuclear or extended family and community. This is especially the case with the counselling and words of wisdom that come from grandparents or elderly relatives. This rich reservoir of child support should never be overlooked.

Nevertheless, HIV/AIDS has also increased the need for more skilled counselling. Increasingly this is being expected of teachers who find that they are being called upon to counsel their pupils and help them deal with the grief, stigma and other stresses that arise from HIV/AIDS in their families. Studies on orphans have identified the

need to help children express their feelings in appropriate ways and the need for those working with children to be able to adopt suitable communication and counselling roles.

Like all other care-givers in the AIDS situation, teachers themselves may need psychological care and help as they strive to steer children through harrowing situations. Above all, they stand in need of personal counselling and assistance when they experience AIDS in themselves or their immediate families. Their psychological coping strategies have to be bolstered so that they can successfully surmount personal tragedy.

To enable educators to cope with these new demands, new programmes in counselling are being established in universities and teacher-training institutions. The need is being increasingly perceived for teachers who can stand by children who are affected by HIV/AIDS as they strive to come to terms with their psychological turmoil. In other words, in addition to the traditional concern of schools with intellectual development, and on top of their new responsibility to work towards the prevention of HIV transmission, there are greater expectations that educational institutions will play a more proactive role in pupil psychological support and counselling.

The school as a multi-purpose development and welfare institution

In most countries, education policy endorses the role of the school as a health-affirming and health-promoting institution for all students. Many countries go further, expecting that through their students schools will become health-affirming and health-promoting institutions for the communities from which the students come and for the families which they will eventually establish. In the short term this may be achieved by programmes such as 'Child-to-Child'. In the long term, it is achieved through the beneficial health impacts of education, especially girls' education, and through education's role in empowering people to demand basic health-care services.

HIV/AIDS has the potential to obstruct the achievement of these aspirations and to subvert the expected benefits. This is because of

excessive compartmentalization in responding to human needs. For bureaucratic purposes there may be merit in categoring needs as education, health, social welfare, community development, water and sanitation, infrastructure, and so forth. The principle of 'divide and conquer' may help to bring order into the apparent chaos of human needs. But faced with HIV/AIDS, a more appropriate principle would be 'unite and conquer'. There is widespread agreement that the only approach that will succeed in dealing with the disease must be multisectoral. Given this premise, and recognizing that education – the school – is the only structure of society that reaches into all communities, physically through the location of schools, and personally through the involvement of almost every family in education, it seems logical that the school should be the focal point for all AIDS control and impact-mitigation activities.

Such a development would be of particular importance in rural areas where the school may be the only physical structure of any substance or permanence. Frequently, school buildings lie idle through much of the day and for many days of the year. There seems to be little to stop, but much to recommend, their more extensive use as centres for the delivery of health-care services, social-welfare interventions, community development activities, and similar services – all in a co-ordinated way with a view to strengthening communities for HIV prevention and mitigating AIDS impacts. Resources do not exist to develop other structures or mechanisms for this, but potential for it is found in the existing infrastructure of schools. The rational use of resources for dealing with the AIDS epidemic requires a radical break from the stereotyped compartmentalized approach to human development. This break could be achieved by converting schools into multi-purpose development and welfare institutions that deliver more than formal school education as traditionally understood.

VI. HIV/AIDS in relation to funding and planning aspects of education

The impact of HIV/AIDS on the funding of education

HIV/AIDS affects the availability of funds for education because of

- the reduced availability of private funds, owing to AIDS-occasioned reductions in family incomes and/or the diversion of family resources to medical care;
- reduced community ability to contribute labour for school developments because of AIDS-related debilitation and/or increasing claims on time and work capacity because of loss of active community members;
- reduced public funds for the system, owing to the AIDS-related decline in national income and pre-emptive allocations to health and AIDS-related interventions;
- the funds that are tied down by salaries for sick but inactive teachers and other educational personnel.

The impact of HIV/AIDS on the availability of private funds

HIV/AIDS results in private funds being less readily available for educational purposes than in a no-AIDS scenario. The principal reasons for this are that when AIDS is present, private incomes decline, costs increase, and other areas are given higher priority than education.

AIDS-related illness and mortality strike hardest at the working-age population. They deprive households of their breadwinners or reduce the productivity of household members. Wage incomes cease upon death. Because there are fewer working-age adults, or these are seriously ill, agricultural households cultivate less ground, are unable to weed and tend crops in the ways that will lead to good yields, or fail to keep livestock in a healthy condition. Within the household, a

large proportion of greatly reduced resources may be devoted to traditional healing, local and other medicines, special foods, and cleansing materials for an AIDS-infected member. To meet its needs, the family may sell off land, draft power animals, or other productive assets. The time devoted to care of the sick takes from what might otherwise have been used in income-generating activities. Funerals of family members or relatives consume a considerable amount of the funds that the immediate or extended family might have available. In addition, funerals of community members or friends make heavy time demands, reducing the productive potential of those attending.

The increase in the number of orphans also puts pressure on household resources. Simultaneously with its negative effect on household incomes, HIV/AIDS increases the numbers in need of support by the household.

Evidence from South Africa shows that consumption patterns change in households which experience an AIDS death: overall expenditures are lower; the amount spent on items such as soap and clothing declines relative to other expenditures; and purchased food represents a smaller share of consumption than food produced by the household (Michael, 2000).

There are also reports from communities that tell of many being so weakened through poverty, hunger and sickness that they are unable to participate in customary self-help activities for school maintenance and development. Rural communities also state that even those among them who are strong and healthy cannot participate in such activities because so much of their time is given to activities on behalf of those who are ill or to helping the families of those who have died.

The bottom line in all of this is that because of HIV/AIDS households tend to have fewer disposable resources and change their priorities in the disposition of those resources. Within those priorities, education does not enjoy a high ranking, especially if it is for girls. Negative offshoots of this situation are that in order to generate assets for the family, a girl may be coerced into early marriage, or in order to generate the regular income needed by the household – including the

school costs of her brothers – she may be encouraged to engage in commercial sex work.

The impact of HIV/AIDS on the availability of public funds

HIV/AIDS affects the availability of national resources for education in almost the same ways as it affects the availability of private funds: when AIDS is present, the national income declines, costs increase, and priorities change.

Among other reasons, the national income declines because of reduced productivity, a reduced tax base, disinvestment and reduced savings, and a reduced capacity to manage resources. Productivity falls because of the deaths, repeated illnesses, absenteeism, late-coming, or low work levels of HIV-infected or affected workers. The disease takes the same course with industrial, agricultural, service and public-sector workers as it does with teachers. They experience the same social obligations to care for the sick or attend funerals. They are equally disturbed in their work by the devastation that is occurring in their families.

Government revenues decline because of the deaths of tax-paying wage-earners and because company profits are eroded by health and funeral expenses for their employees. AIDS deaths make it necessary to pay terminal and life-insurance benefits earlier than originally planned for. This reduces capital accumulation, which is further impaired by the lowered capacity of individuals to save. The loss of qualified and experienced managerial personnel reduces the capacity of a government and its organs to collect, effectively manage, and disburse public resources. This loss also makes it difficult for a government to build the HIV/AIDS perspective into all its planning and resource-utilization schedules.

Costs increase for both government and private enterprise because of increased labour costs (especially HIV/AIDS absenteeism, death benefits and funeral costs). Because of AIDS, the costs of medical and life insurance, and of medical treatment, have increased significantly in several countries, thereby imposing heavier costs on employers. Thus, AIDS-related costs (medical care, benefits, absenteeism,

funerals, etc.) more than doubled for a large Zambian industry between 1991 and 1993; for a mining company in South Africa shift losses due to illness doubled in a six-year period; and for a transport company in Zimbabwe, total AIDS-related costs equalled one-fifth of its profits in 1996. On top of all this, employers are experiencing additional costs for the recruitment and training of replacements for AIDS-affected workers, and for AIDS education programmes designed to protect their workers from becoming infected.

The impact of HIV/AIDS on economic growth is felt most seriously by the countries that are hardest hit by the epidemic. An evaluation for Zambia estimates that "without unprecedented infusion of foreign aid, national income could be reduced by as much as 10 per cent" (Seshamani, 1999, p. 55). The projected impact of the disease on other economies is equally severe (*Table 6.1*). One implication of this is that with public resources being smaller than they would have been had there been no AIDS, proportionately less will be available for national spending, in education as in other sectors.

Table 6.1. The projected impact of HIV/AIDS on economic growth

Country	Economic impact of HIV/AIDS
India	Annual AIDS costs are estimated at $11 billion or 5 per cent of GNP
Kenya	By 2005, GNP will be 14.5 per cent smaller than if there had been no AIDS
Namibia	AIDS cost almost 8 per cent of GNP in 1996
South Africa	AIDS costs 2 per cent of GNP every year
Tanzania	GNP will be 15-25 per cent lower as a result of AIDS
Zambia	AIDS could reduce national income by as much as 10 per cent

Source: ONAP, 1999, pp. 8 and 10; Seshamani, 1999, p. 55.

Resource availability for education will also be affected by the priorities which affect intrasectoral allocations. It is likely that even though economic growth is being retarded, health budgets will have to increase if they are to manage the disease, while continuing to provide regular health services (including responses to what could be a galloping TB epidemic, fuelled by AIDS, but extending considerably beyond HIV-infected individuals). The scale of the orphan crisis must necessarily draw down a large proportion of national resources. Almost inevitably, additional funds will have to be directed to the recruitment and training of replacements for those lost to the epidemic. These new and increasing demands will surely threaten efforts to protect expenditures in sectors such as education.

How can educational planning respond?

In almost all developing countries the education sector has learned that it must do battle for the resources it needs in order to discharge its mandate. In the AIDS situation it will have to continue to do so. But because of the problems that have been outlined, it must come better armed. This means transparent proof of better stewardship, more effective management of resources entrusted to it, and a clear understanding of its needs in the context of HIV/AIDS. Full and above-board accountability, total absence of corruption, elimination of all waste or spending on non-essentials, and what almost amounts to a compulsion to use resources in the most cost-effective and efficient ways: these features must inform every approach to the public or private sectors, or to aid agencies, for financial support. They are not easy features to build into a system. They demand scrupulous financial discipline, meticulous and imaginative planning, and a high-principled and responsible work ethic.

There is also the need to be exceptionally well-informed on the sector, how it is being affected by AIDS, the responses it is making, the adjustments it finds necessary, the initiatives it has put in place, the forward-thinking and planning it is working on. As noted in other contexts, this calls for an effective and well-maintained AIDS-related management information system. It also calls for commitment by the ministry's leadership and senior management to understanding the AIDS crisis and its impacts throughout the education sector. This

could find embodiment in a high-level think-tank that would continue to explore and try to come to grips with what the epidemic is doing to the sector and how the sector can be proactive in its response.

There is a further principle, one that refers back to Article 26 (1) of the United Nations Declaration on Human Rights: "Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages." This was reaffirmed and somewhat expanded in the Dakar Framework for Action:

> *We hereby collectively commit ourselves to the attainment of the following goals ...:*
> *ensuring that by 2015 all children, with special emphasis on girls, children in difficult circumstances and from ethnic minorities, have access to and complete free and compulsory primary education of good quality (UNESCO, 2000a, Article 7, ii).*

The principle is the need to ensure that no matter how limited national resources may be, they are used to work towards the goal of free primary education, especially for girls and children in difficult circumstances such as the poor, orphans, and children living in remote rural areas. Costs can be maintained for or transferred to those who are more affluent, but the thrust of financial planning in the context of HIV/AIDS should be to remove all educational costs from the poor, those orphaned by AIDS and other causes, and disadvantaged rural children and girls.

The impact of HIV/AIDS on aid agency involvement in education

> *HIV/AIDS affects aid agency involvement in education because of:*

- the diversion of the attention of aid agencies to coping with the epidemic;
- the concern of aid agencies to promote capacity building and develop a self-sustaining system, both of which they see being undermined by widespread HIV/AIDS;

- the concern of aid agencies lest the effectiveness of their inputs be eroded by the impacts of the epidemic;
- aid agency uncertainty about supporting extended training abroad for persons from heavily infected countries;
- enhanced aid agency commitment to addressing educational factors that impact on HIV transmission and control.

The response of AID agencies to the HIV/AIDS crisis

The HIV/AIDS epidemic is the very antithesis of the all-round development that the international community and country co-operating partners strive to promote. Aid agency assistance and interventions are guided by the principles of poverty reduction and sustainable human development. But the agencies see HIV/AIDS causing unspeakable human suffering, making poverty worse and less bearable, reducing productivity, depleting hard-won human capacity, reversing the health and other development gains they struggle so valiantly to promote, and reinforcing various aspects of the dependency syndrome.

Faced with this scenario, aid agencies and the international community are increasing the attention they give to the HIV/AIDS problem and how to cope with its impacts. Overall, they have two principal concerns:

1. to slow down and eventually terminate HIV transmission; and
2. to strengthen impact mitigation capacities.

The agencies find that if they are to address these concerns the whole issue of HIV/AIDS must be built into all their operations. An emerging tendency is to mainstream HIV/AIDS into agency programmes and activities, thereby establishing an environment where it will be more comprehensively, consistently and strategically addressed. Since the capacity to mainstream or deal with HIV/AIDS is often not well developed, many agencies find it necessary to pay special attention to building up their own capacity so that they may be better equipped to provide support and assistance to countries with high levels of infection. Local and international NGOs also find themselves being constrained to attend first to internal capacity in

order to equip themselves to work for HIV prevention and impact mitigation.

Given that agency personnel and resources are not unlimited, this means some diversion of attention from other pressing concerns. The imperative of considering every issue in the light of HIV/AIDS absorbs expertise and funds that might otherwise have gone to more traditional aspects of development, education included. The epidemic has imposed a straitjacket on the aid agencies and international community, constraining their freedom of choice and demanding that they approach development from a certain perspective and use a proportion of their resources in a certain way. It is with them as with the local education or other ministry. At the local level, scarce national human resources have to be dedicated to planning and managing the impact of the epidemic; at the aid agency level, scarce agency expertise likewise has to be committed to interventions that will support management of the epidemic's impacts and contribute to slowing down the rate of new infections.

One practical outcome of this very necessary concern of the international community with the HIV/AIDS situation is the added impetus it gives to education and other ministries to develop their own strategic plans for addressing the epidemic. The World Bank now requires that HIV/AIDS be included as a component of all country assistance strategies (World Bank, 1999). This means that country strategy documents must incorporate credible plans detailing how the country intends to address the epidemic. National responses to requirements such as these necessitate that planning at the national level be solidly based on finer and more detailed planning at sectoral and sub-national levels.

HIV/AIDS has other implications, positive and negative, for agency support to education. Negatively, there is danger that measures to screen the entry of HIV-positive individuals to some industrialized countries may work to make it more difficult for those who are HIV-negative to participate in training programmes based in such countries.

In a positive vein, the World Bank has recommended that assistance to capacity building be specially directed to the countries

most severely affected by AIDS (World Bank, n.d.). The Bank has also committed itself to strengthening activities, among them the education of girls and the expansion of gender initiatives, that would reduce the impact of the socio-economic factors that influence the spread of HIV (World Bank, 1999).

Heightened awareness of the salience of education for AIDS prevention and control

But possibly the most significant outcome of the AIDS epidemic, from an international perspective, is the way it has galvanized world concern. It has alerted the international community to the need to address a major health and development crisis. But it has gone far beyond this. In a very fundamental way, it has highlighted the need to make more meaningful progress towards poverty eradication, to address the root causes of vulnerability, and to make the goal of sustainable human development more attainable.

Within this global vision, attention is being increasingly focused on education as the cornerstone of poverty reduction efforts. Because education brings positive benefits in such areas as disempowerment, lack of knowledge, health care and gender equity, the international community sees it as contributing simultaneously to poverty reduction and to HIV control. Notwithstanding the need that aid agencies experience to devote resources to strengthening their own capacity to deal with HIV issues, by and large they are prepared to channel more resources to education because of its twofold role in poverty and HIV reduction. In almost a perverse manner, the AIDS crisis can promote greater external assistance for education.

The impact of HIV/AIDS on the planning and management of education

HIV/AIDS affects the planning and management of the education system because of:

- the imperative of managing the system for the prevention of HIV transmission;

- the loss through mortality and sickness of various education officials charged with responsibility for planning, implementing, and managing policies, programmes and projects;
- the need for all capacity building and human resource planning to provide for:
  (a) potential personnel losses,
  (b) developing new approaches, knowledge, skills and attitudes that will enable the system to cope with the epidemic's impacts and will monitor how it is doing so, and
  (c) establishing intrasectoral epidemic-related information systems;
- the need for more accountable and cost-effective financial management at all levels in response to reduced national, community and private resources for education;
- the need for sensitive care in dealing with personnel and the human rights issues of AIDS-affected employees and their dependants;
- the need for a sector-wide strategic approach that will spell out how the Education Ministry intends to address HIV/AIDS.

The loss of managerial personnel

In many education ministries, capacity is at a premium. Responsibilities increase, but with no proportionate increase in personnel. Establishments are small and departments are often so tightly stretched that officers must work across weekends and cannot take annual contractual leave. Relatively few senior officials have received formal training for their posts, but most have the unassailable asset of long experience. Based on such experience, many must single-handedly take charge of their given area of expertise.

When HIV/AIDS scythes its way through this small but experienced management cadre, the results can be devastating. Schools are affected when teachers die, but the overall supply of teachers and the potential for replacement are both large. It is very different with education managers. Each one tends to be the only available expert. There is little or no potential for replacement. Their loss, through AIDS morbidity and mortality, is total. In this way, the epidemic attacks the ministry at its very heart, causing it irreplaceable and inestimable

loss. The whole system suffers from the ministry's consequent inability to plan, implement, and manage policies, programmes and projects. Even worse, losses of this nature occur at a time when the ministry needs all of its human resources, and all the wisdom of its institutional memory, to plan for and manage the HIV/AIDS crisis.

Managing and planning for a developing education sector are demanding activities which require the Education Ministry to be firmly in charge of policy and strategy development and implementation. At all times this is a challenge, but more so when there is risk that HIV/AIDS may decimate key human resources. AIDS is not restricted by authority or hierarchical levels but crosses all boundaries.

Managing education for AIDS prevention

To minimize its impact on the ministry's core activities, key aims should be to prevent further HIV infection in its workforce and to help those already infected to live positively. While the ministry must show this double concern for students, teachers and those working in schools and colleges, it should be equally diligent in extending similar concern to its own immediate staff – senior officials as well as other employees in finance, planning and personnel divisions; professionals and support staff in inspectorates, examinations, curriculum development, and other support areas; senior policy-makers and implementers and all of their back-up staff; those located at the central headquarters and those spread across the country at provincial and district levels. They are all at risk. They all stand in need of ministry guidelines, directives and HIV-prevention programmes that will enhance their capacity to avoid HIV infection and that will enable them to continue to live and function positively, should they be or should they become infected.

An AIDS-related management information system

A good epidemic-related information system is central to managing and planning the education sector in an AIDS-dominant environment. Ideally such a system would show, by category, and disaggregated by gender:

- the extent and trends in teacher, ministry official and student mortality;
- the number of employees currently HIV infected or ill with an AIDS-related condition;
- the number of employees maintained on the payroll but unable to work;
- the number of employees with HIV/AIDS in their immediate families;
- the extent of HIV/AIDS-related sporadic absenteeism, sick leave and compassionate leave;
- the impact of such absenteeism/leave on the ministry's ongoing activities, both in schools and colleges and in the various ministry offices;
- the number of employees, especially females, in need of more flexible timetables that will facilitate their provision of care to sick household members;
- the number of hours or days given to funerals; and
- the funeral costs which the Education Ministry bears.

Personnel issues

In addition, the ministry needs to evaluate how, when, in what numbers and at what cost it will recruit personnel to assist or replace those affected by the epidemic. In addition to replacements for teachers and college lecturers, the Education Ministry must provide for its own professional, managerial and support staff needs. This will require a close study of policies on part-time or short-term appointments. It will also require a strengthened personnel section that will be fully appraised of staff losses and turnover, how long it takes to recruit replacement staff, and how to draw up training plans for new staff and for those who have to be transferred to other areas of work. There will also be need to devise ways of accelerating appointments so that institutions and the ministry itself are not excessively weakened by staff depletion.

The concern of the ministry should extend beyond adjusting itself to the personnel-related impacts and responses required by HIV/AIDS. The well-being of its employees should be of paramount importance, especially since it will almost certainly have to rely upon fewer of

them to accomplish even more. In this regard, the ministry is likely to experience a macabre inverted version of 'musical chairs' – instead of a chair being removed while the number of players to be seated remains constant, the number of players will be reduced while the number of chairs remains constant (unless, because of additional AIDS-related tasks, they increase). In these circumstances, a ministry which is concerned about the well-being of its employees will devise ways of showing recognition and appreciation for what is being accomplished. It will also establish employee-friendly confidential contact points where its employees can freely discuss their concerns and anxieties.

Involving persons living with HIV/AIDS

In its planning and management of the education sector, an education ministry that faces a major HIV/AIDS problem should be open to drawing on the resources inherent in persons living with HIV/AIDS. Employees who are affected in this way should know that their special insights are highly valued and that they can still make major contributions to the functioning and development of the sector. In certain cases, the ministry might find it desirable actually to seek out the services of such persons because of the special understanding they can bring to personnel matters, advocacy and sensitization, and peer education within the ministry and its institutions.

A strategic approach

Much of the foregoing points to the need for the Education Ministry to formulate a strategic approach that will clearly express:

- its policy on HIV/AIDS;
- the relationship of this policy to the wider national AIDS policy;
- the ministry's commitment to well-coordinated multisectoral interventions and to work in close co-operation with communities, religious bodies and other organs of civil society;
- its proposals for dealing with the disease in its institutions and throughout the system;
- its strategies for personnel and human resource support and replacement;

- guidelines for use in concrete situations in schools, colleges and at lower levels in the system;
- its commitment to the development of an information base to guide policy and planning;
- its concern that gender sensitivity be manifested in all HIV/AIDS interventions; and
- how it proposes to monitor the impacts of the disease in the sector and to measure the success of its interventions.

VII. Conclusion: the HIV/AIDS-driven need for a new approach to education and its delivery

One point has emerged clearly from the discussion in the previous pages. If education is to respond to the challenges of HIV/AIDS it must undergo radical transformation. Whether the concern is with prevention or with coping with the impacts, every dimension must be examined. When it first made its appearance in the late 1970s and early 1980s, HIV/AIDS brought something new into the world. The world has not been the same since and never again will it be the same.

It is similar with an area such as education which has a multiplicity of interactions with the disease and its effects. Education can never again be the same. Its overall purpose – to prepare individuals to live harmoniously, constructively and happily as members of local, national and international communities – remains unchanged. But the ways of achieving this purpose in a world with AIDS are very different from what they were in a world without AIDS.

This poses a special challenge to policy-makers and planners in education. They cannot rest content with the linear continuation or expansion of the current system. They must be prepared to look with new eyes at every programme, every methodology, every traditional stratagem. They may use a number of the building blocks that form part of the existing structures of education. But they will have to arrange these blocks in new ways, leading to a new structure that may look very different.

The highly positive aspect of all this is that HIV/AIDS is forcing a critical re-examination of what education is all about and how it can best be delivered. It has shaken the world out of a tendency to attach immutable axiomatic status to existing content, technology and delivery paradigms. While not calling for a clean sweep, the AIDS crisis is very decisively calling for a new look at education and a new understanding.

Responding to the challenge of designing education in a world with AIDS requires that educational policy-makers and planners manifest certain qualities and adopt certain approaches. These would include:

- great flexibility;
- much resourcefulness and openness to change;
- tolerance for a diversity of solutions and models;
- willingness to loosen up bureaucratic constraints and procedures;
- co-operation and collaboration with several partners – from other government sectors, civil society, communities, the churches;
- meaningful decentralization, based upon school autonomy and the effective participation of local stakeholders;
- more purposeful use of the resources inherent in persons living with HIV/AIDS, community members, and students;
- enhanced understanding of what education is all about; and
- sensitivity to the needs of those infected or affected by HIV, the poor and those in difficult circumstances.

These features and approaches were placed in a somewhat broader context at the World Education Forum held in Dakar in April, 2000, when UNESCO's Director-General pledged that UNESCO would strengthen the capacity of governments and education ministries

> *to replace costly, rigid and culturally alienating educational structures with less expensive delivery systems that are more flexible, more diversified and universally affordable, without ever sacrificing quality (UNESCO, 2000b, p. 5).*

Planning for education in the context of HIV/AIDS must be directed to a system that is more flexible, more diversified, and more universally affordable. But it must also be directed to a system that ensures high quality. Only in this way will education be able to respond to the needs of an AIDS-afflicted world.

References

Badcock-Walters, P. 2000. *AIDS Brief for sectoral planners and managers. Education sector*. Durban: Health Economics and HIV/AIDS Research Division (HEARD), University of Natal.

Cohen, D. 1999. *The HIV epidemic and the education sector in sub-Saharan Africa*. HIV and Development Programme, Issues Paper No. 32. New York: UNDP.

Goliber, T. 2000. *Exploring the implications of the HIV/AIDS epidemic for educational planning in selected African countries: the demographic question*. Washington, DC: The Futures Group International.

Hargreaves, J.R.; Glynn, J.R. 2000. *Educational attainment and HIV infection in developing countries: a review of the published literature*. London: Infectious Disease Epidemiology Unit, London School of Hygiene and Tropical Medicine (mimeo).

Hunter, S.; Fall, D. 1998. *Orphans and HIV/AIDS in Zambia. An assessment of orphans in the context of children affected by HIV/AIDS*. Draft Report for UNICEF. Lusaka: UNICEF.

Hunter, S.; Williamson, J. 2000. *Children on the brink. Updated estimates and recommendations for interventions*. Washington, DC: USAID.

Melbye, M. et al. 1986. "Evidence for the heterosexual transmission and clinical manifestations of human immuno-deficiency virus infection and related conditions in Lusaka, Zambia". In: *The Lancet*, pp. 1113-5.

Michael, K. 2000. *What do we know about HIV/AIDS in the economy?* Presentation to HIV/AIDS in Education Workshop, convened and facilitated by the Health Economics and HIV/AIDS Research

Division, University of Natal, 11 and 12 April, 2000. Durban: University of Natal.

Namibia, Government of the Republic of. 1999. *My future is my choice. Extra curricular life skills training manual.* Windhoek: The Youth Health and Development Programme, Government of the Republic of Namibia and UNICEF.

ONAP (Office of National AIDS Policy). 1999. *Report on the presidential mission on children orphaned by AIDS in sub-Saharan Africa: findings and plan of action.* Washington, DC: The White House.

Oxfam. 1999. *Education now. Break the cycle of poverty.* Media Report. Oxford: Oxfam International.

Seshamani, V. (ed.). 1999. *Overcoming barriers to Zambia's development. Dismantling the tripod of deprivation, debt and disease.* A UNICEF Mid-Term Review Study. Lusaka: UNICEF.

Siamwiza, R.J.; Chiwela, J.M. 1999. *Teachers' knowledge, attitudes, skills and practices in teaching HIV/AIDS prevention, impact mitigation and psychosocial life skills in schools and colleges.* A Report for UNESCO/UNAIDS Project on Integrating HIV/AIDS Prevention in School Curricula. Lusaka: UNESCO.

Swaziland, Ministry of Education. 1999. *Impact assessment of HIV/AIDS on the education sector.* Mbabane: Ministry of Education.

UNAIDS. 1998a. *HIV/AIDS and human rights. International guidelines.* Geneva: UNAIDS (Joint United Nations Programme on HIV/AIDS).

— 1998b. *AIDS epidemic update: December 1998.* Geneva: UNAIDS.

— 1999a. *Listen, learn, live! World AIDS campaign with children and young people. Key issues and ideas for action.* Geneva: UNAIDS.

— 1999b. *Listen, learn, live! World AIDS campaign with children and young people. Young people and HIV/AIDS.* Geneva: UNAIDS.

— 1999c. *AIDS epidemic update: December 1999.* Geneva: UNAIDS.

UNESCO. 2000a. *Education for All: meeting our collective commitment. The Dakar Framework for Action.* Paris: UNESCO (mimeo).

— 2000b. Address by Mr. Koïchiro Matsuura, Director-General of UNESCO, World Education Forum, Dakar, Senegal, 26 April 2000. Paris: UNESCO (mimeo).

— 2000c. *Overcoming the effects of HIV/AIDS on basic education.* Report of Sub-Plenary Session, World Education Forum, Dakar, Senegal, 27 April 2000. Paris: World Education Forum Secretariat, UNESCO (mimeo).

UNICEF. 1996. *Training in classroom stress management for primary school teachers. Evaluation of pilot project.* Lusaka: UNICEF (mimeo).

World Bank. 1993. *Tanzania. AIDS assessment and planning study.* A World Bank Country Study. Washington, DC: The World Bank.

— 1997. *Confronting AIDS. Public priorities in a global epidemic.* A World Bank Policy Research Report. Oxford: Oxford University Press.

— 1999. *Intensifying action against HIV/AIDS in Africa: responding to a development crisis.* Africa Region, The World Bank. Washington, DC: The World Bank.

— n.d. *The impact of AIDS on capacity building.* The partnership for capacity building in Africa. Africa region, The World Bank. Washington, DC: The World Bank.

Suggestions for further reading

1. CIDA. 2000. *CIDA's HIV/AIDS action plan, 1 June, 2000.* Hull, Quebec: CIDA.

2. Gachuhi, D. 1999. *The impact of HIV/AIDS on education systems in the eastern and southern Africa region and the response of education systems to HIV/AIDS: life skills programmes.* Nairobi/ UNICEF: Eastern and Southern Africa Regional Office (ESARO).

3. HEARD. 2000. *AIDS brief for professionals.* (Series of 11 Briefing Papers for various professionals - politicians, religious leaders, social workers, development personnel, etc.). Durban: Health Economics and HIV/AIDS Research Division (HEARD), University of Natal.

4. HEARD. 2000. *AIDS brief for sectoral planners and managers.* (Series of 17 Briefing Papers for various sectors - Education, Social, Tourism, Sports, NGO, etc.). Durban: Health Economics and HIV/AIDS Research Division (HEARD), University of Natal.

5. Helland, A-M.; Lexow, J.; Carm, E. 1999. *The impact of HIV/ AIDS on education.* LINS Report No. 4. Oslo: Centre for International Education, Faculty of Education, Oslo College.

6. Oulai, D.; Carr-Hill, R. 1994. *The impact of HIV/AIDS on education: report of an IIEP seminar.* Paris: UNESCO/ International Institute for Educational Planning.

7. Seifert, K. 1997. *Early intervention: HIV/AIDS programs for school-aged youth.* ABEL Technical Paper No. 7. Washington, DC: USAID.

8. Shaeffer, S. 1994. *The impact of HIV/AIDS on education: a review of literature and experience.* Background Paper presented to an IIEP Seminar, Paris, 8-10 December, 1993. Paris: UNESCO/ International Institute for Educational Planning.

9. UNAIDS. 1997. *Integrating HIV/STD prevention in the school setting.* Geneva: UNAIDS (Joint United Nations Programme on HIV/AIDS).

10. UNAIDS. 1997. *Impact of HIV and sexual health education on the sexual behaviour of young people: a review update.* Geneva: UNAIDS.

11. UNAIDS. 1998. *Guide to the strategic planning process for a national response to HIV/AIDS (1. Introduction. 2. Situation analysis. 3. Response analysis. 4. Strategic plan formulation. 5. Resource mobilization).* Geneva: UNAIDS.

12. UNAIDS. 1999. *Peer education and HIV/AIDS: concepts, uses and challenges.* Geneva: UNAIDS.

13. UNAIDS. 1999. *The UNAIDS report.* Geneva: UNAIDS.

14. UNAIDS. 1999. *Listen, learn, live! World AIDS campaign with children and young people (1. Young people and HIV/AIDS. 2. Children and HIV/AIDS. 3. Key issues and ideas for action. 4. Facts and figures).* Geneva: UNAIDS.

15. UNICEF. 1999. *Children orphaned by AIDS. Front-line responses from eastern and southern Africa.* New York: UNICEF.

16. UNICEF. 1999. *Orphans and vulnerable children. A situation analysis, Zambia 1999.* Lusaka: UNICEF.

17. Zambia, Ministry of Health. 1999. *HIV/AIDS in Zambia. Background, projections, impacts, interventions.* Lusaka: Central Board of Health, Ministry of Health.

HIV-impact: 2000
UNDP sponsored electronic discussion, March to July 2000 (220 messages).
Archives can be found at: http://www.edc.org/GLG/hiv-impact/hypermail/

IIEP publications and documents

More than 1,200 titles on all aspects of educational planning have been published by the International Institute for Educational Planning. A comprehensive catalogue is available in the following subject categories:

Educational planning and global issues
General studies – global/developmental issues

Administration and management of education
Decentralization – participation – distance education – school mapping – teachers

Economics of education
Costs and financing – employment – international co-operation

Quality of education
Evaluation – innovation – supervision

Different levels of formal education
Primary to higher education

Alternative strategies for education
Lifelong education – non-formal education – disadvantaged groups – gender education

Copies of the Catalogue may be obtained on request from:
IIEP, Dissemination of Publications
information@iiep.unesco.org
Titles of new publications and abstracts may be consulted at the following website: *http://www.unesco.org/iiep*

The International Institute for Educational Planning

The International Institute for Educational Planning (IIEP) is an international centre for advanced training and research in the field of educational planning. It was established by UNESCO in 1963 and is financed by UNESCO and by voluntary contributions from Member States. In recent years the following Member States have provided voluntary contributions to the Institute: Denmark, Germany, Iceland, India, Ireland, Norway, Sweden, Switzerland and Venezuela.

The Institute's aim is to contribute to the development of education throughout the world, by expanding both knowledge and the supply of competent professionals in the field of educational planning. In this endeavour the Institute co-operates with interested training and research organizations in Member States. The Governing Board of the IIEP, which approves the Institute's programme and budget, consists of a maximum of eight elected members and four members designated by the United Nations Organization and certain of its specialized agencies and institutes.

Chairperson:
Dato'Asiah bt. Abu Samah (Malaysia)
Director, Lang Education, Kuala Lumpur, Malaysia.

Designated Members:
Eduardo A. Doryan
Vice-President, Human Development Network (HDN), The World Bank, Washington D.C., USA.
Carlos Fortin
Deputy to the Secretary-General, United Nations Conference on Trade and Development (UNCTAD), Geneva, Switzerland.
Miriam J. Hirschfeld
Special Adviser, Social Change and Mental Health, World Health Organization (WHO), Geneva, Switzerland.
Jeggan Senghor
Director, African Institute for Economic Development and Planning (IDEP), Dakar, Senegal.

Elected Members:
José Joaquin Brunner (Chile)
Director Education Programme, Fundación Chile, Santiago, Chile.
Klaus Hüfner (Germany)
Professor, Freie Universität Berlin, Berlin, Germany.
Faïza Kefi (Tunisia)
Minister of the Environment, Ariana, Tunisia.
Tamas Kozma (Hungary)
Director-General, Hungarian Institute for Educational Research, Budapest, Hungary.
Teboho Moja (South Africa)
Visiting Professor, New York University, New York, USA.
Teiichi Sato (Japan)
Vice-Minister of Education, Ministry of Education, Science, Sports and Culture, Tokyo, Japan.
Michel Vernières (France)
Professor, University of Paris I, Panthéon-Sorbonne, Paris, France.

Inquiries about the Institute should be addressed to:
The Office of the Director, International Institute for Educational Planning,
7-9 rue Eugène-Delacroix, 75116 Paris, France.

The booklet

This booklet examines briefly the nature and features of HIV/AIDS and the impact of the epidemic on development. Within this context, it examines the interaction between the epidemic and education from two perspectives: the use of education in preventing HIV transmission, and the impact of the disease on education systems. It deals more extensively with the latter aspect, analyzing how HIV/AIDS affects education in terms of demand, clientele (with special reference to orphans), supply, and such quality-related aspects as content, organization and funding. A recurrent theme is that the extensive two-way interaction between HIV/AIDS and educational provision necessitates a radical re-examination of many of the premises underlying education as currently delivered - education in an AIDS-infected world cannot be the same as education in an AIDS-free world.

The author

Michael J. Kelly, a member of the Jesuit order, is Professor of Education at the University of Zambia, Lusaka. His involvement with education in Zambia began with secondary school teaching and administration in 1956. He has been associated with all of Zambia's post-independence educational reforms and has worked extensively with various international agencies. His formal university responsibilities are in the areas of educational administration and policy. He has published extensively in such areas as the education of girls, how structural adjustment and debt have affected the education system, and the development of education in Zambia. In recent years he has become increasingly involved in analyzing and documenting the HIV/AIDS epidemic's potential to undermine an education system.

453353 114

iiep
international institute for educational planning

ISBN 92 803 1198 0

BEST COPY AVAILABLE
112